DOCUMENT RESUME

ED 261 325 CG 018 523

AUTHOR Wright, David
TITLE 1984-85 Iowa Study of Alcohol and Drug Attitudes and Behaviors among Youth. Report I: Normative and Trend Data.
INSTITUTION Iowa State Dept. of Public Instruction, Des Moines.
PUB DATE Jun 85
NOTE 66p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS *Adolescents; Behavior Patterns; *Drinking; *Drug Use; High Schools; Junior High Schools; Marihuana; *Parent Influence; *Peer Influence; School Role; *Student Attitudes; Tobacco; Trend Analysis
IDENTIFIERS *Iowa

ABSTRACT

Current data on youth substance abuse behaviors, knowledge, and attitudes are important in addressing social and health issues. To obtain these data, students in grades 6, 8, 10, and 12 from 144 Iowa school districts completed a 105-item survey assessing demographics, peer influence, parent influence, school influence, personal preferences, and substance use/nonuse. This report presents the background and results of that survey in six sections. Following the introduction and an opening section which describes development of the survey instrument, and sampling and data analysis procedures, data on self-reported substance use and nonuse are presented for alcohol, tobacco, marijuana, other drugs, and polysubstances. The section on external influences on substance use and nonuse behaviors discusses parent, peer, and school influences. The section on personal variables presents data on internal influences (attitudes, knowledge, motives) on substance use or nonuse as they relate to alcohol, marijuana, and other substances. A brief summary of findings concludes each of these sections. The final section summarizes results by the four major areas addressed in the study: (1) the present status of substance use, attitudes, and knowledge among youth; (2) trends since 1975 in use, attitudes, and knowledge; (3) major influences in use and nonuse; and (4) recommendations for school personnel, parents, and youth agencies based on the study findings. Sixty-three data tables are provided throughout the text. (MCF)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED261325

1984-85 Iowa Study of Alcohol and Drug Attitudes and Behaviors Among Youth

David Wright, Consultant
Substance Abuse Prevention Education

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Carl Linden

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Report I: Normative and Trend Data

1984-85 Iowa Study of Alcohol and Drug Attitudes and Behaviors Among Youth

Report I: Normative and Trend Data

Prepared by
Substance Education Program
Instruction and Curriculum Division
June 1985

CG 018523

State of Iowa
DEPARTMENT OF PUBLIC INSTRUCTION
Grimes State Office Building
Des Moines, Iowa 50319-0146

State Board of Public Instruction

Lucas DeKoster, President, Hull
Dianne L.D. Paca, Vice President, Garner
Wesley S. Chapman, Des Moines
Jolly Ann Davidson, Clarinda
Stephen C. Gerard, Sigourney
Karen K. Goodenow, Wall Lake
John Moats, Council Bluffs
Mary E. Robinson, Cedar Rapids
Harlan Van Gerpen, Cedar Falls

Administration

Robert D. Benton, Commissioner and Executive Officer of the State Board of Public Instruction
David H. Bechtel, Administrative Assistant
James E. Mitchell, Deputy Commissioner

Instruction and Professional Education Branch

Donald V. Cox, Associate Superintendent
A. John Martin, Director, Instruction and Curriculum Division
Paul Spurlock, Assistant Director
David Wright, Consultant, Substance Abuse Prevention Education

Publications Section

Lisa Bartusek, Information Specialist
Tonya Cox, Graphic Artist
Carl Rejba, Graphic Artist
Joyce Short, Compositor

Preface

The Substance Education Program of the Iowa Department of Public Instruction (DPI) began a series of tri-annual studies of youth substance behaviors, attitudes and knowledge in the fall of 1975. The youth studies have continued with data collections in 1978, 1981 and 1984.

The findings of the 1975, 1978 and 1981 studies were disseminated to Iowa educators, health planners and agencies that serve youth. These reports were useful in planning and implementing substance education, prevention and intervention programs in Iowa. The report of the 1984 findings should prove to be as useful.

The findings of the 1984-85 Iowa Study of Alcohol and Drug Attitudes and Behaviors Among Youth will be presented in four separate reports:

- Normative data for 1984 and relevant comparisons with 1975, 1978 and 1981 findings.
- Individual district reports of student responses to selected survey items.
- Regional data reports to area education agencies for selected survey items.
- A technical report on psychosocial variables associated with substance nonuse and use among Iowa youth.

This report deals with normative data on several items from the 1984 youth survey. Several comparisons with prior studies are also presented. This report should be of particular importance to school persons, health planners and persons in the substance abuse field.

The author of the youth surveys would like to make two observations about Iowa youth, their families and their schools. First, the series of youth surveys indicates some very positive characteristics in a majority of Iowa youth. Readers of these reports can appreciate and respect these youth. Second, the widespread participation of Iowa school districts in the surveys indicates a sincere interest in the healthful development of Iowa youth.

Table of Contents

Page

I. Introduction 1

II. Procedures 2

1. Selection of District Samples 2

2. Selection of Student Samples 3

3. Youth Survey Instrument 4

III. Self-Reported Substance Use and Nonuse 5

1. Alcohol Use and Nonuse 5

2. Tobacco Use and Nonuse 11

3. Marijuana Use and Nonuse 14

4. Other Drug Use and Nonuse 18

5. Polysubstance Use and Nonuse 21

6. Summary of Findings for Substance Use and Nonuse 23

IV. External Influences on Substance Use and Nonuse Behaviors 24

1. Parent Influence 27

2. Peer Influence 29

3. School Influence 31

4. Summary of External Influence Findings 32

V. Personal Variables 33

1. Overview of Personal Variables 34

2. Alcohol Behaviors and Personal Variables 39

3. Marijuana Behaviors and Personal Variables 43

4. Other Substances and Personal Variables 46

5. Related Behaviors 48

6. Summary of Findings for Personal Variables 49

VI. Summary and Recommendations 50

Research Questions 1 and 2: Status and Trends 51

Research Question 3: Influences on Youth Substance Decisions 54

Research Question 4: Recommended Actions for School Persons and Others 56

Table of Tables

Table 1 School District Samples for 1984 3

Table 2 Student Samples by District Size Categories 3

Table 3 Student Samples by Grade Level 3

Table 4 Students Completing the Survey by Grade Level and Sex 4

Table 5 Age of Onset for Alcohol Use by Grade Levels 6

Table 6 Percentages of Grade Level Samples Reporting Alcohol Use in 1975, 1978, 1981 and 1984 6

Table 7 Percent Male and Female Reporting Alcohol Use in 1975, 1978, 1981 and 1984 7

Table 8 Percentages of Student Samples Reporting Alcohol Use by District Size in 1975, 1978, 1981 and 1984 8

Table 9 Percentages of Grade Level Samples Reporting Alcohol Consumed Per Drinking Occasion in 1984 8

Table 10 Percentages of Student Samples Reporting Alcohol Consumption by District Size in 1984 9

Table 11 Percent Male and Female Reporting Alcohol Consumption Per Occasion in 1984 9

Table 12 Drinks Consumed Per Occasion Among Alcohol User Groups 10

Table 13 Students' Intentions to Use Alcohol at Age 21 10

Table 14 Age of Onset for Tobacco Use 12

Table 15 Percentages of Grade Level Samples Reporting Tobacco Use in 1981 and 1984 12

Table 16 Percent Male and Female Reporting Tobacco Use 12

Table 17 Percentages of Student Samples Reporting Tobacco Use by District Size in 1981 and 1984 13

Table 18 Students' Intentions to Use Tobacco at Age 21 13

Table 19 Percentages of Grade Level Samples Reporting "Smokeless Tobacco" Use in 1984 .. 14

Table 20 Age of Onset for Marijuana Use by Grade Levels 15

Table 21 Percentages of Grade Level Samples Reporting Marijuana Use in 1975, 1978, 1981 and 1984 15

Table 22 Percent Male and Female Reporting Marijuana Use in 1975, 1978, 1981 and 1984 17

Table 23 Percentages of Student Samples Reporting Marijuana Use by District Size in 1975, 1978, 1981 and 1984 17

Table 24 Students' Intentions to Use Marijuana at Age 21 18

Table 25 Age of Onset for Other Drug Use by Grade Levels 19

Table 26 Percentages of Grade Level Samples Reporting Other Drug Use in 1975, 1978, 1981 and 1984 19

Table 27 Percent Male and Female Reporting Other Drug Use in 1975, 1978, 1981 and 1984 .. 20

Table 28 Percentages of Student Samples Reporting Drug Use by District Size in 1975, 1978, 1981 and 1984 21

Table 29 Polysubstance Use in 1981 and 1984 by Grade Level 22

Table 30 Polysubstance Use Among Total Samples During 1975, 1978, 1981 and 1984 23
Table 31 Polysubstance Use within Various Sized School Districts in 1981 and 1984 23
Table 32 Perceived Influences on Substance Nonuse Decisions in 1984 25
Table 33 Most Important Source of Information about Substances 25
Table 34 Perceived Sources of Help for Substance Problem by Grade Level 26
Table 35 Parental Attitudes Toward Alcohol and Marijuana 27
Table 36 Parental Guidelines for Student Substance Use 28
Table 37 Percentages of Total Sample Reporting Parent Use of Tobacco 29
Table 38 Percentages of Total Sample Reporting Parent Use of Alcohol 29
Table 39 Peer Use of Alcohol, Tobacco and Marijuana in 1984 30
Table 40 Peer Norms Regarding Substance Use 31
Table 41 Perceived Impact of School Programs on Substance Behaviors for Total Sample 32
Table 42 Overview of Motives for Not Using Substances 34
Table 43 Overview of Motives for Using Substances 35
Table 44 General Student Attitudes Toward Substances 37
Table 45 Overview of Student Attitudes Toward Substances 37
Table 46 Student Attitudes Toward Instrumental Substance Use 37
Table 47 Substance Knowledge by Grade Level 38
Table 48 Motives for Not Using Alcohol 39
Table 49 Motives for Using Alcohol 40
Table 50 General Student Attitudes Toward Alcohol 41
Table 51 Student Attitudes Toward Specific Alcohol Behaviors 41
Table 52 Student Decisions Regarding Alcohol Use at Friend's Home 52
Table 53 Student Decisions Regarding Alcohol Use in Group Situations 42
Table 54 Motives for Not Using Marijuana 43
Table 55 Motives for Using Marijuana 44
Table 56 Students' General Attitude Toward Marijuana 45
Table 57 Students' Attitudes Toward Marijuana Behavior 45
Table 58 Student Decisions Regarding Marijuana Use in a Group Situation 45
Table 59 Motives for Not Using Other Drugs 46
Table 60 Motives for Using Other Drugs 47
Table 61 Student Attitudes Toward Specific Tobacco Behavior 47
Table 62 Conforming Behaviors Reported by Total 1984 Sample 48
Table 63 Deviant Behaviors Reported by Total 1984 Sample 49

I. Introduction

Substance use continues to present some serious social problems for school persons, law enforcement persons, health professionals and Iowa citizens. Substance use and abuse always presents possible harm to the user's health and the well-being of his or her family. Current data on youth substance behaviors, knowledge and attitudes is important in responsibly addressing these social and health issues.

During the 1970s, a number of prevention programs were introduced in Iowa schools and communities in an attempt to reduce the occurrence and severity of the social and health problems related to substance use. Several significant socioeconomic events have occurred in recent years, such as problems in the farm economy, public sensitivity to drinking and driving issues, and declining enrollments. These prevention efforts and socioeconomic events have very likely affected youth substance behaviors and attitudes.

The 1984-85 Iowa Study of Alcohol and Drug Behaviors and Attitudes Among Youth attempted to answer four questions:

- What is the status of substance use, attitudes and knowledge among youth?
- What are some important trends in youth substance use, attitudes and knowledge?
- Which people seem to be the major influences in a youth's decision to use or not to use substances?
- What actions do the findings of the 1984-85 study suggest for school persons and others?

Several investigators have studied adolescent substance use. Their studies have identified many variables of particular relevance in assessing substance use, attitudes and knowledge among youth. The research designs and findings of three groups of researchers were particularly important to the present study.[1]

These studies suggested that the 1984-85 survey instrument include the following variables:

Dependent Variables:
- Use/nonuse of substances

Independent Variables:
- Parent modeling behaviors
- Parent normative standards
- Peer modeling behaviors
- School normative standards
- Perceived school influence

Intervening Variables

A. Adolescent preferences
   - decision-making style
   - motives for not using substances
   - motives for using substances
   - intent to use substances as an adult
   - religiousity

B. Adolescent norms
   - attitudes toward substance behaviors
   - general substance attitudes
   - age of onset of substance use
   - conventional (nonsubstance) behaviors
   - deviant behaviors

Survey items were selected to assess those variables.

[1]Jessor, Richard; Chase, James A.; and Donovan, John E. "Psychosocial Correlates of Marijuana Use and Problem Drinking in a National Sample of Adolescents." *American Journal of Public Health.* Vol. 70, No.6, June 1980, p.604.
Biddle, Bruce J.; Bank, Barbara J.; and Martin, Majorie M. "Parental and Peer Influence on Adolescents." *Social Forces.* Vol. 58. June 1980, pp.1057-1079.
Johnston, Floyd D.; Backman, Jerald G.; and O'Malley, Patricl. M. *Highlights from Student Drug Use in America 1975-1983.* Rockville, Maryland: National Institute on Drug Abuse, 1984.

A pilot test of the 1984-85 youth survey was conducted during April of 1984 in four Iowa school districts and two treatment centers for adolescent substance abusers. The pilot study produced a 105-question survey which was administered statewide in October and November, 1984.

The final version of the youth survey was designed to be answered anonymously by students in grades six, eight, 10 and 12. Almost every student could complete the survey in 50 minutes or less.

II. Procedures

The 1984-85 study followed many of the same procedures used in the preceding three surveys. In late August, 1984, a letter was sent to the superintendents of 190 school districts. Each superintendent was informed of the purposes of the study and the procedures to be followed locally. The superintendent was given the choice of participating or not participating in the youth survey. Forty-six school districts chose not to participate.

The superintendents' letter asked them to do the following:

- Randomly select students for grade-level samples.
- Schedule times and places for group administration of the survey.
- Send parent consent letters home with students.
- Return completed surveys to the DPI by December, 1984.

Completed youth surveys were edited and coded upon receipt at the DPI. Data from individual survey forms were key-punched and entered on a computer file. Data analyses were conducted through the use of an SAS program, a computer program for data treatment.

In February, 1985, a data packet was sent to each of the participating districts. The packet contained local data on selected items from the 1984 survey and normative data for districts of similar size.

1. Selection of District Samples

Three sampling procedures were used in the 1984 study. One sampling procedure (trend analyses) involved repeated measures in school districts that were originally selected 1975. The second sampling procedure (program comparisons) added school districts which had implemented special program initiatives such as peer helping, the Growing Healthy Curriculum Project,and the COSSE Project. The third procedure (AEA comparisons) added school districts to more adequately represent youth and schools in each of Iowa's 15 area education agencies (AEAs).

A stratified random sample of Iowa public school districts was prepared for the 1975 youth survey. The 1975 sampling design represented four population categories (urban, semiurban, semirural and rural) of Iowa public school districts based on the total school enrollment and the general population density of the school district. The sampling design also accounted for representation of school districts according to four geographical regions and the boundaries of the area education agencies. School districts were selected based on their enrollment, population density, and distribution within the 15 area education agencies.

The 1975 sampling procedure was reviewed with the 1980 U.S. Census data and 1984-85 school enrollment data. The design was found to be appropriate for trend analyses between the four studies of 1975, 1978, 1981 and 1984.

Table 1 describes the distribution of school district samples and the rate of participation in the 1984 survey.

Seventy public school districts from the original sample (1975) participated in the 1984 study and 22 districts did not participate. Another 98 public school districts were selected for the 1984 study and 74 elected to participate.

Table 1
School District Samples for 1984

Categories of Districts	Urban	Semiurban	Semirural	Rural	Total
Total Number of Iowa Districts in Category	8	24	54	352	438
Original Sample Size (Districts)	4	20	22	46	92
Number of Districts From Original Sample in 1984 Study	1	17	16	36	70
Purposive Sample (Districts added to 1984 Study)	4	3	18	49	74
Total Number of Districts in 1984 Study	5	20	34	85	144
Percent of Total Number of Iowa Districts in Categories	63%	83%	63%	24%	33%

2. Selection of Student Samples

The student samples were selected by building and grade level. The superintendent was informed of individual buildings in the district from which student samples were to be selected. School personnel were to randomly select a minimum of 18 students in each of the sixth, eighth, 10th and 12th grades. A small district, therefore, was expected to draw a minimum sample of 72 students. Larger districts with more attendance centers were expected to produced larger student samples.

Table 2 describes the actual and ideal student samples by size categories of schools. Table 3 describes the actual and ideal distribution of student samples by grade level.

Table 2
Student Samples by District Size Categories

	Urban	Semiurban	Semirural	Rural	Total
Actual Sample	3,863 (24%)	3,043 (19%)	3,017 (19%)	5,996 (38%)	15,919
Ideal Sample	1,664 (25%)	1,231 (19%)	1,207 (18%)	2,533 (38%)	6,635

Table 3
Student Samples by Grade Level

	6th Grade	8th Grade	10th Grade	12th Grade	Total
Actual Sample	3,473 (22%)	4,037 (26%)	4,083 (26%)	4,051 (26%)	15,644
Ideal Sample	1,509 (23%)	1,575 (23%)	1,709 (26%)	1,783 (27%)	6,576

A weighting procedure was applied in the data analyses to account for discrepancies between the ideal and actual student samples. Similar weighting procedures were also applied with 1975, 1978 and 1981 data in order to make comparisons across studies.

Table 4 describes the sex and grade-level distributions in the 1984 youth sample.

Some sampling biases should be considered in interpreting the results of the 1984 youth survey:

- The study sample included public school districts only. No attempt was made to sample nonpublic school students.
- School districts were permitted to not participate in the survey; 76 percent of the original (1975) sample participated in the present study and 76 percent of the purposive sample chose to participate.
- Students and parents were permitted to not participate in the survey; 81 percent of the school districts met or surpassed their minimum sample size.
- No attempt was made to sample youth who were absent from school or who had "dropped out" of school.

Table 4
Students Completing the Survey by Grade Level and Sex

	6th Grade	8th Grade	10th Grade	12th Grade	Total
Male	1,666 (48%)	1,968 (49%)	1,984 (49%)	1,927 (48%)	7,545 (48%)
Female	1,807 (52%)	2,069 (51%)	2,099 (51%)	2,124 (52%)	8,099 (52%)
Totals	3,4739	4,037	4,083	4,051	15,644

3. Youth Survey Instrument

A 105-item survey was developed for administration to students in grades six, eight, 10 and 12. The instrument was designed to be readable and answerable by students at each of the four grade levels. Students were informed that it would take less than 50 minutes to complete the survey, that they could choose not to respond to some questions, and that their responses would remain confidential.

The survey was organized in six sections:

Demographic: questions 1-6.
Peer influence: questions 7, 13-15, 34-39, 59, 60-64, 65-67.
Parent influence: questions 7, 8-12, 59, 60-64, 100-105.
School influence: questions 59, 60-64, 83-87.
Personal preferences: questions 16-26, 27-33, 40-45, 46-49, 52, 55, 57, 65-67, 68-81, 88-99.
Substance use/nonuse: questions 50, 51, 53, 54, 56, 58.

Several questions were designed to have students rate or assess the magnitude of the influence exerted by peers, parents and schools upon their substance behaviors.

Three urban districts and two semiurban districts requested permission to omit questions 100-105 from the survey. These questions relate to parent alcohol and tobacco use. The omission of the questions did not detract from the findings of the study.

The remainder of this report presents findings of the study grouped into four sections: self-reported substance use, influencers of substance use/nonuse behavior, personal variables, and summary and recommendations.

III. Self-Reported Substance Use and Nonuse

This section describes findings related to student substance use and nonuse. These findings are based on self-reported use and nonuse during the fall months of 1984.

Substance use data in the 1984 study were comparable to data collected nationally by the Institute for Social Research at the University of Michigan. Comparison of self-reported use between the four categories of school districts also appears to substantiate the reliability of the substance use/nonuse data.

This part of the report covers five topics: alcohol use and nonuse, tobacco use and nonuse, marijuana use and nonuse, other drug use and nonuse, and polysubstance use. Data in each section are presented according to the following format:

Age of onset
Frequency of use by grade level (1975-78-81-84)
Frequency of use by sex (1975-78-81-84)
Frequency of use by district size (1975-78-81-84)
Intent to use as adult
Summary

Some information about the frequency of substance use was clustered. The frequency-of-use questions (question 50 alcohol, question 56 marijuana, and question 58 other drugs) each had nine possible responses, clustered as follows:

Nonuse included:	I never use/drink, and I have used—, but I don't now
Casual use included:	Less than once a month, and about once a month
Regular use included:	2 or 3 times each month, and about once a week
Heavy use included:	2 or 3 times a week, 4 or more times a week, and about once or more each day

The frequency of tobacco use (question 53) is reported in tables as follows:

Nonuse included:	I never smoke tobacco, and I have smoked, but I don't now
Casual use included:	Smoke occasionally (1-6 times) each week
Regular use included:	Smoke several (7-25) times each week
Heavy use included:	Smoke 4-10 times each day, and smoke more than 11 times each day

The term "ever used" includes any reported frequency of use and the response, "I have used—, but I don't now."

All data appearing in tables are percentages of samples responding to the questions.

1. Alcohol Use and Nonuse

The age of onset for alcohol use was assessed by asking students how old they were the first time they ever had their own glass of beer or wine, shot of liquor, or a mixed drink of any kind. Student responses for this question are reported in Table 5.

Some observations are appropriate from Table 5. Approximately 95 percent of the 12th grade sample had tried alcohol. Most youth (63-74 percent) had tried alcohol by age 14. A slightly greater percentage of sixth and eighth grade youth had tried alcohol by age 12 than had their 10th and 12th grade counterparts.

The patterns for age-of-onset for alcohol use were similiar in the 1978, 1981 and 1984 studies. There was an increase in the number of sixth and eighth grade students who had never tried alcohol by age 12 in the 1984 study as compared with 1978 and 1981 data.

Table 5
Age of Onset for Alcohol Use by Grade Levels*

	Never Tried Alcohol	Tried Alcohol by Age 12	Tried Alcohol by Age 14	Tried Alcohol by Age 16	Tried Alcohol by Age 18
Grade 6	50.9	44.3 (49)			
Grade 8	26.1	56.2	67.7 (73.8)		
Grade 10	11.0	45.2	74.1	83.3 (88.8)	
Grade 12	5.2	35.2	63.5	87.0	91.2 (94.9)

*Data in parentheses represents the inclusion of sample percentage for "Don't remember"

Age-of-onset data for 12th grade students in 1975, 1978 and 1981 did not vary from 1984 data. The percentage of 12th grade students who had never tried alcohol was 5 percent in 1975, 6 percent in 1978, 6 percent in 1981 and 5 percent in 1984. More than 52 percent of the 12th grade students in 1984 had tried alcohol between ages 13 and 16, compared to 49 percent of 12th grade students in 1978 and 50 percent of 12th grade students in 1981.

The frequency of alcohol use by grade level is reported in Table 6. This table presents the reported frequencies of alcohol use in 1975, 1978, 1981 and 1984.

Students were asked to identify the frequency of their alcohol use through the question, "During an average month, how often do you usually drink *any amount* of beer, wine or liquor?"

A few general patterns are apparent from the 1984 data in Table 6. The frequency of alcohol use increased with age. The greatest decrease in the number of nonusers seemed to occur between eighth and 10th grades. A relatively large increase (15 percent) in the number of casual users of alcohol seemed to occur between sixth and eighth grades. The largest increase (17 percent) in regular use of alcohol was apparent between eighth and 10th grades. The greatest increase (8 percent) in heavy use of alcohol was observed between 10th and 12th grades.

More students in each grade said that they were nonusers of alcohol in 1984 than did students in the other years studied. This downward trend in alcohol use was particularly noticeable in the casual and regular use categories for sixth and eighth grade students. There also seemed to be a decline in the regular use among 10th grade students and in heavy use among 12th grade students.

Table 6
Percentages of Grade Level Samples Reporting Alcohol Use in 1975, 1978, 1981 and 1984

		Total	6th Grade	8th Grade	10th Grade	12th Grade
Nonuse	1975	39.1	62.6	43.3	26.6	16.1
	1978	41.2	67.5	52.0	28.0	19.2
	1981	45.8	72.6	53.7	32.7	19.8
	1984	47.7	80.4	58.2	34.4	22.4
Casual	1975	33.0	27.8	37.3	38.2	28.8
	1978	31.2	23.6	33.9	36.0	28.8
	1981	26.9	20.6	30.6	33.3	23.5
	1984	25.4	14.8	29.6	31.7	24.0
Regular	1975	20.9	7.8	16.2	27.9	36.5
	1978	21.3	7.3	11.9	29.6	36.8
	1981	21.3	5.8	14.3	28.6	39.4
	1984	21.0	3.9	10.4	27.7	39.5
Heavy	1975	6.9	1.7	3.2	7.3	18.4
	1978	6.2	1.6	2.3	6.4	15.1
	1981	6.0	1.1	1.4	5.4	17.3
	1984	6.0	.9	1.8	6.3	14.1

Fig. A

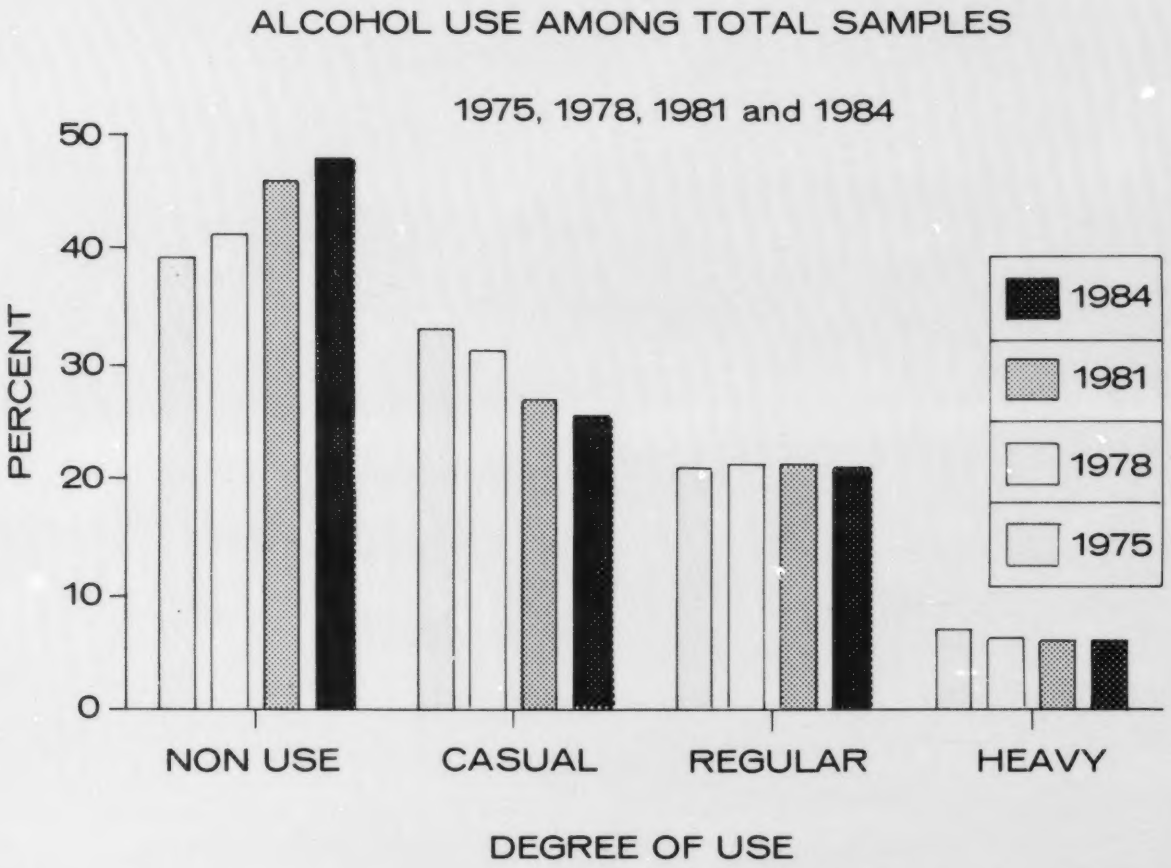


Figure A illustrates an increase in the number of nonusers of alcohol in 1984 as compared to 1975, 1978 and 1981. The graph also demonstrates a decline in the number of casual users of alcohol. Regular and heavy use among the total samples has remained consistent over the four studies.

Comparisons of male and female frequency of alcohol use are reported in Table 7. The 1984 data indicate that male and female students were very similar in the frequency of alcohol use. Female students were less likely to be heavy alcohol users and more likely to be abstainers than were male students. Both male and female students were less likely to use alcohol in 1984 than they were in 1981.

Table 7
Percent Male and Female Reporting Alcohol Use in 1975, 1978, 1981 and 1984

		Never Used	Ever Used	Casual	Regular	Heavy
Male	1975	33.4	*	35.3	22.7	8.7
	1978	39.4	71.2	29.1	23.6	7.8
	1981	30.4	69.6	26.7	23.4	8.7
	1984	33.8	66.2	25.7	21.1	7.7
Female	1975	45.0	*	30.8	19.2	5.2
	1978	42.7	63.7	33.1	19.3	4.8
	1981	35.3	64.7	25.6	23.5	5.2
	1984	39.2	60.8	25.2	20.9	4.4

*Unable to calculate due to wording of question in 1975

Some differences in alcohol use patterns among the four categories of school districts are evident in Table 8. In general, alcohol use in 1984 appeared to be least prevalent in semirural schools and most prevalent in urban schools. Casual use was reported most frequently by semiurban students. Regular and heavy use was most frequently reported by urban students.

Comparisons of school district categories in the various survey years indicate an increase in the number of nonusers of alcohol in 1984. This increase in nonuse occurred mainly in semirural and rural school districts. A comparison between the survey years indicates an increase in the regular and heavy use of alcohol among urban students and a decrease in the heavy use of alcohol among semiurban and semirural students. There was a decrease in the casual use of alcohol among students in urban and rural districts.

Table 8
Percentages of Student Samples Reporting Alcohol Use by District Size in 1975, 1978, 1981 and 1984

		Urban	Semiurban	Semirural	Rural	Total Sample
Nonuse	1975	40.8	41.0	38.5	37.3	39.1
	1978	35.7	43.6	42.0	43.2	41.2
	1981	46.7	49.7	45.6	42.8	45.3
	1984	46.1	47.6	49.5	47.6	47.6
Casual	1975	31.9	30.6	32.7	35.1	33.0
	1978	38.5	31.6	29.2	27.6	31.2
	1981	25.9	25.4	25.9	29.2	27.2
	1984	23.4	27.4	25.1	25.9	25.4
Regular	1975	19.5	21.7	20.7	21.6	20.9
	1978	20.5	20.0	22.3	22.0	21.3
	1981	20.7	19.2	22.2	22.4	21.5
	1984	22.6	20.4	20.0	20.8	21.0
Heavy	1975	7.8	6.7	8.1	5.9	6.9
	1978	5.3	4.8	6.6	7.1	6.2
	1981	6.7	5.7	6.2	5.7	6.0
	1984	7.9	4.5	5.5	5.7	6.0

Tables 9, 10 and 11 present data for student responses to the question, "When you drink alcoholic beverages, how many drinks do you u ually consume on any one occasion?" This was the first time the question was asked in the youth studies. It was chosen to indicate alcohol consumption "norms" among age groups, sexes and school district sizes. The norms are reported as follows:

Abstain: I do not drink
Light: Less than one drink
Moderate: 1 or 2 drinks
Heavy: 3 or 4 drinks
Very Heavy: 5 or 6 drinks or more than 6 drinks

Table 9
Percentages of Grade-Level Samples Reporting Alcohol Consumed Per Drinking Occasion in 1984

	Total	6th Grade	8th Grade	10th Grade	12th Grade
Abstain	39	69	48	27	18
Light	16	19	24	14	7
Moderate	15	8	16	20	15
Heavy	14	2	7	18	28
Very Heavy	16	2	6	22	32

Table 10
Percentages of Student Samples
Reporting Alcohol Consumption by District Size in 1984

	Urban	Semiurban	Semirural	Rural	Total
Abstain	37	39	41	39	39
Light	14	18	15	16	16
Moderate	16	15	14	15	15
Heavy	14	14	14	14	14
Very Heavy	20	12	15	15	16

Table 11
Percent Male and Female Reporting
Alcohol Consumption per Occasion in 1984

		Abstain	Light	Moderate	Heavy	Very Heavy
Total Sample	**Males**	37	16	14	12	21
	Females	41	16	16	15	12
12th Grade Sample	**Males**	17	6	11	22	44
	Females	18	8	20	32	21
10th Grade Sample	**Males**	28	11	17	15	27
	Females	25	16	22	20	18

A general trend toward more alcohol consumption per drinking occasion was apparent in grades six through 12 (Table 9). Abstinence and light drinking were the "norms" for sixth and eighth grades. Among 10th grade students, 20 percent were moderate drinkers, 18 percent were heavy drinkers, and 22 percent were very heavy drinkers. By comparison, the data indicate that among 12th grade students, 15 percent were moderate drinkers, 28 percent were heavy drinkers and 32 percent were very heavy drinkers.

Comparisons of alcohol comsumption patterns among various sizes of school districts are reported in Table 10. Most comparisons between district samples indicate very similar patterns for alcohol consumption. Urban students were more frequently represented as very heavy alcohol users (20 percent) than were semiurban (12 percent), semirural (15 percent) and rural (16 percent) students.

Male and female alcohol consumption norms are reported in Table 11. Male and female consumption norms appear to be very similar for abstinence and light and moderate consumption. Females more frequently report themselves to be heavy users than do males. By contrast, males were much more likely to report themselves to be very heavy consumers of alcohol than were females. Differences between male and female consumption patterns are most apparent for heavy and very heavy use among 12th grade students.

Drinking norms were estimated by cross-tabulating the number of drinks consumed per occasion with the reported frequency of alcohol use. The data in Table 12 represents only the data for the sub-sample of students who reported themselves to be alcohol users.

Forty-eight percent of the alcohol user group reported use of alcohol about once per month. Of this sub-group, 28 percent reported consuming less than one drink per occasion and 37 percent reported consuming one or two drinks per occasion.

Forty-two percent of the alcohol user group reported that they used alcohol about once per week. Of this sub-group, 32 percent reported consuming three or four drinks per occasion and 44 percent reported consuming more than five drinks per occasion.

A small minority of alcohol users (10 percent) reported using alcohol two or more times per week. Of this sub-group, 19 percent reported consuming three to four drinks per occasion and 72 percent reported consuming five or more drinks per occasion.

Table 12
Drinks Consumed Per Occasion Among Alcohol User Groups

Frequency of Use	Drinks Per Occasion					
	Less Than 1 Drink	1 or 2 Drinks	3 or 4 Drinks	5 or 6 Drinks	More than 6 Drinks	Total Group
Once per month	28	37	20	8	7	1,248 48%
Once per week	4	20	32	24	20	1,108 42%
2 or more per week	2	6	19	22	50	249 10%
Total User Group	15	26	25	16	17	2,605

Table 13
Students' Intentions to Use Alcohol at Age 21*

	6th Grade	8th Grade	10th Grade	12th Grade	Total
I will not drink alcoholic beverages	47	27	16	13 (22)	25
About once a month	30	34	30	28 (38)	30
About once each week	14	24	33	36 (39)	27
About two or three times each week	7	12	16	20 (12)	14
About every day	2	4	5	4 (2.5)	4

*Numbers in parentheses represent percentages of 12th grade sample reporting alcohol use in 1984.

Among all reported alcohol users, 15 percent reported consuming one or two drinks, 25 percent reported consuming three or four drinks, and 33 percent reported consuming five or more drinks per occasion.

Table 13 presents data for students' responses to the question, "When you are 21 years old, how often do you think you will drink alcoholic beverages?" This question required students to estimate the frequency of alcohol use they might adopt as adults.

Intent to use alcohol seemed to vary with age. The percentages of students who reported that they would not use alcohol or would use it once a month decreased with each increase in grade level. The percentages of students who stated that they would use alcohol once each week or about two or three times each week increased with each increase in grade level. The number (2-5 percent) of students who intended to use alcohol about every day remained fairly constant across grade levels. Very few students (13-27 percent) in grades eight through 12 did not intend to use alcohol as adults.

The following statements summarize some of the more relevant findings concerning alcohol use and nonuse:

- Very few (5 percent) 12th grade students had not tried alcohol.
- Most Iowa youth (63-74 percent) had tried alcohol by age 14.
- Approximately 88 percent of 10th and 12th grade students had tried alcohol by age 16.
- More students reported themselves to be nonusers of alcohol in 1984 then did students in prior studies.
- Alcohol use in 1984 appeared to be least prevalent in semirural schools and most prevalent in urban schools.
- Regular and heavy use of alcohol among total student samples appeared to remain fairly consistent across the four study years.
- Comparison of study years indicates an increase in 1984 in the regular and heavy use of alcohol among urban students and a decrease in heavy use of alcohol among semiurban and semirural students.
- The frequency of alcohol use among male and female students was very similar. Females were less likely to be heavy users of alcohol than were males.
- A small percentage of students did not intend to use alcohol as adults. More than 71 percent of the students intended to adopt a "moderate" alcohol use pattern as adults.
- "Heavy" and "very heavy" consumption patterns became more frequent with each increase in grade level. Students reporting the consumption of three or more drinks per occasion rose from 4 percent of sixth graders to 60 percent of 12th graders.
- Male students were much more likely to report very heavy alcohol consumption (five or more drinks per occasion) than were females.

2. Tobacco Use and Nonuse

Data on tobacco use were collected only in the 1981 and 1984 studies. The age at which students first tried tobacco is reported in Table 14. Students responded to the question, "How old were you when you *first* tried tobacco?"

The data in Table 14 indicate that many students have tried tobacco. The number of students who tried tobacco appeared to increase with age, with approximately 50 percent of the students trying tobacco by age 14. Comparisons of 1981 and 1984 data indicated that significantly fewer students at each grade level had tried tobacco in 1984.

The frequency of tobacco use is reported in Table 15. These data reflect student responses to the question, "During an average *week*, how often do you usually smoke tobacco...cigarettes, pipes, cigars?"

There was a pattern of increased tobacco use with each higher grade level. The largest increase in the use of tobacco seemed to occur between sixth and eighth grades. The greatest increase in the casual, regular and heavy use of tobacco was apparent between eighth and 10th grades.

Comparisons of 1981 and 1984 data indicate an overall decline in tobacco use in 1984. This downward trend occurred in all use categories for each grade level.

Comparisons between male and female patterns of tobacco use are reported in Table 16. The data suggest that males and females are very similar in their tobacco use patterns. There were declines in each category of tobacco use for both males and females in 1984 as compared to 1981.

An examination of the data in Table 17 reveals that tobacco use was most frequent among urban students and least frequent among rural students. Heavy tobacco use was most frequently reported for urban students and least frequently reported for rural students.

Table 18 describes the patterns of tobacco use students intended to adopt as adults. The data reflect student responses to the question, "When you are 21 years old, how often do you think you will smoke tobacco?"

Table 14
Age of Onset for Tobacco Use

	Never Tried	Tried Tobacco by Age 12	Tried Tobacco by Age 14	Tried Tobacco by Age 16	Tried Tobacco by Age 18
Grade 6	74.8	23.4 (25.1)			
Grade 8	58.4	34.8	39.8 (41.4)		
Grade 10	41.6	37.6	51.5	56.7 (58.4)	
Grade 12	32.2	34.4	50.1	62.4	65.8 (67.8)

*Numbers in parentheses include percentages of student samples reporting "Don't remember"

Table 15
Percentages of Grade Level Samples Reporting Tobacco Use in 1981 and 1984

		Total	6th Grade	8th Grade	10th Grade	12th Grade
Never	1981	67.0	84.0	68.4	61.2	57.3
	1984	73.5	86.6	76.9	67.5	64.8
Stopped	1981	18.5	12.3	21.5	20.5	19.2
	1984	16.3	10.2	16.7	18.8	18.4
Casual	1981	5.3	2.7	5.0	7.2	6.1
	1984	4.6	2.4	3.9	6.2	5.8
Regular	1981	2.3	.6	1.7	2.8	3.7
	1984	1.5	.5	1.1	1.9	2.4
Heavy	1981	6.9	.5	3.4	8.4	13.7
	1984	4.1	.4	1.4	5.5	8.7

Table 16
Percent Male and Female Reporting Tobacco Use

		Never	Stopped	Casual	Regular	Heavy
Male	1981	67.4	19.6	4.3	2.3	6.4
	1984	73.4	16.6	4.6	1.6	3.8
Female	1981	66.6	17.5	6.3	2.2	7.4
	1984	73.5	15.9	4.7	1.5	4.4

Table 17
Percentages of Student Samples Reporting Tobacco Use by District Size in 1981 and 1984

		Urban	Semiurban	Semirural	Rural	Total
Never	1981	69.9	71.9	67.8	67.3	68.7
	1984	70.2	74.1	73.3	74.9	73.3
Stopped	1981	16.1	16.7	18.6	18.4	17.7
	1984	16.6	15.9	16.8	16.0	16.3
Casual	1981	5.6	3.6	4.4	5.9	5.1
	1984	5.2	4.0	4.4	4.6	4.6
Regular	1981	1.9	1.9	2.5	2.1	2.1
	1984	2.0	2.2	1.2	1.2	1.6
Heavy	1981	6.6	5.9	6.8	6.5	6.4
	1984	6.1	3.8	4.3	3.2	4.2

Table 18
Students' Intentions to Use Tobacco at Age 21*

	6th Grade	8th Grade	10th Grade	12th Grade	Total Sample
I will not smoke tobacco	92	90	85	84 (83)	87
Occasionally (1-6 times) each week	5	6	7	7 (6)	6
Several times (7-25) times each week	2	2	3	2 (2)	2
About 4-10 times each day	1 (5)	1	3	3	2
About 11 or more times each day	1	1	3	4 (4)	2

*Numbers in parentheses represent percentages of 12th grade sample reporting tobacco use in 1981.

Approximately 87 percent of the students did not intend to smoke tobacco as adults. There were very few differences between grade level samples in their intentions to use tobacco occasionally or several times each week. Very few students at any grade level intended to smoke tobacco four or more times each day. The intentions of 12th grade students to use tobacco as adults closely corresponded with their actual reported use of tobacco in 1984.

A question was added to this year's study to determine the frequency of "smokeless tobacco" use among Iowa youth. The question was phrased, "Do you use 'smokeless tobacco' (snuff, chewing tobacco, plug)?" Student responses to this question are reported in Table 19.

The data for tobacco use and nonuse in 1981 and 1984 suggests the following observations:

- Approximately 50 percent of the youth have tried tobacco, with the greatest initial use occurring between ages 9 and 12.
- Approximately 10 percent of Iowa youth were tobacco smokers; the percentages ranged from 3 percent of sixth graders to 17 percent of 12th graders. Comparable figures for 1981 were 15 percent of total sample, 4 percent of sixth grade and 24 percent of 12th grade.
- The greatest increase in the casual, regular and heavy use of tobacco occurred between eighth and 10th grades.
- Comparisons of 1981 and 1984 data indicate an overall decline in tobacco use in 1984.
- Very few differences in the patterns of tobacco use existed between male and female students.
- Heavy tobacco use was most frequently observed among urban students and least frequently observed among rural students.
- Approximately 87 percent of the youth in the 1984 survey did not intend to smoke tobacco as adults.
- The use of "smokeless tobacco" is relatively uncommon (3-6 percent of users) among Iowa youth.

Table 19
Percentages of Grade Level Samples
Reporting "Smokeless Tobacco" Use in 1984

	6th Grade	8th Grade	10th Grade	12th Grade
Never	84	77	72	73
Stopped	12	15	17	16
1-6/week	3	6	6	5
Daily	1	2	5	7

3. Marijuana Use and Nonuse

Students were asked to respond to the question, "How old were you when you *first* tried marijuana (pot, grass, hash)?" Their responses to this question are reported in Table 20.

The data in Table 20 indicate that most youth who have tried marijuana did so between ages 13 and 16. Approximately 35 percent of the 12th grade students in 1984 had tried marijuana by age 18. This compares with 44 percent of 12th grade students in both 1981 and 1978, and 43 percent of 12th grade students in 1975.

Data from 1978 indicate that 75 percent of sixth grade, 85 percent of eighth grade, 66 percent of 10th grade and 56 percent of 12th grade students had not tried marijuana. Data from 1981 indicates that 96 percent of sixth grade, 86 percent of eighth grade, 71 percent of 10th grade and 56 percent of 12th grade students had not tried marijuana. When the three study years (1978, 1981 and 1984) are compared, an overall downward trend in the use of marijuana is apparent.

The 1984 data reveal that 26 percent of urban youth, 22 percent of semiurban youth, 15 percent of semirural youth and 12 percent of rural youth had tried marijuana by age 18. This indicates that the larger the school district, the more likely that students will try marijuana and begin their use at an earlier age.

Frequency of marijuana use by grade level samples is reported in Table 21. Students responded to the question, "During an average month, how often do you usually use any amount of marijuana (pot, grass, hash)?"

Table 20
Age of Onset for Marijuana Use by Grade Levels

	Never Tried Marijuana	Tried Marijuana by age 12	Tried Marijuana by age 14	Tried Marijuana by age 16	Tried Marijuana by age 18
Grade 6	96.6	2.9 (3.4)			
Grade 8	91.4	5.5	8.2 (8.6)		
Grade 10	78.6	5.9	14.5	21.0 (21.4)	
Grade 12	65.4	5.4	14.6	29.0	34.2 (34.6)

*Numbers in parentheses include the response "Don't remember"

Table 21
Percentages of Grade Level Samples Reporting Marijuana Use in 1975, 1978, 1981 and 1984

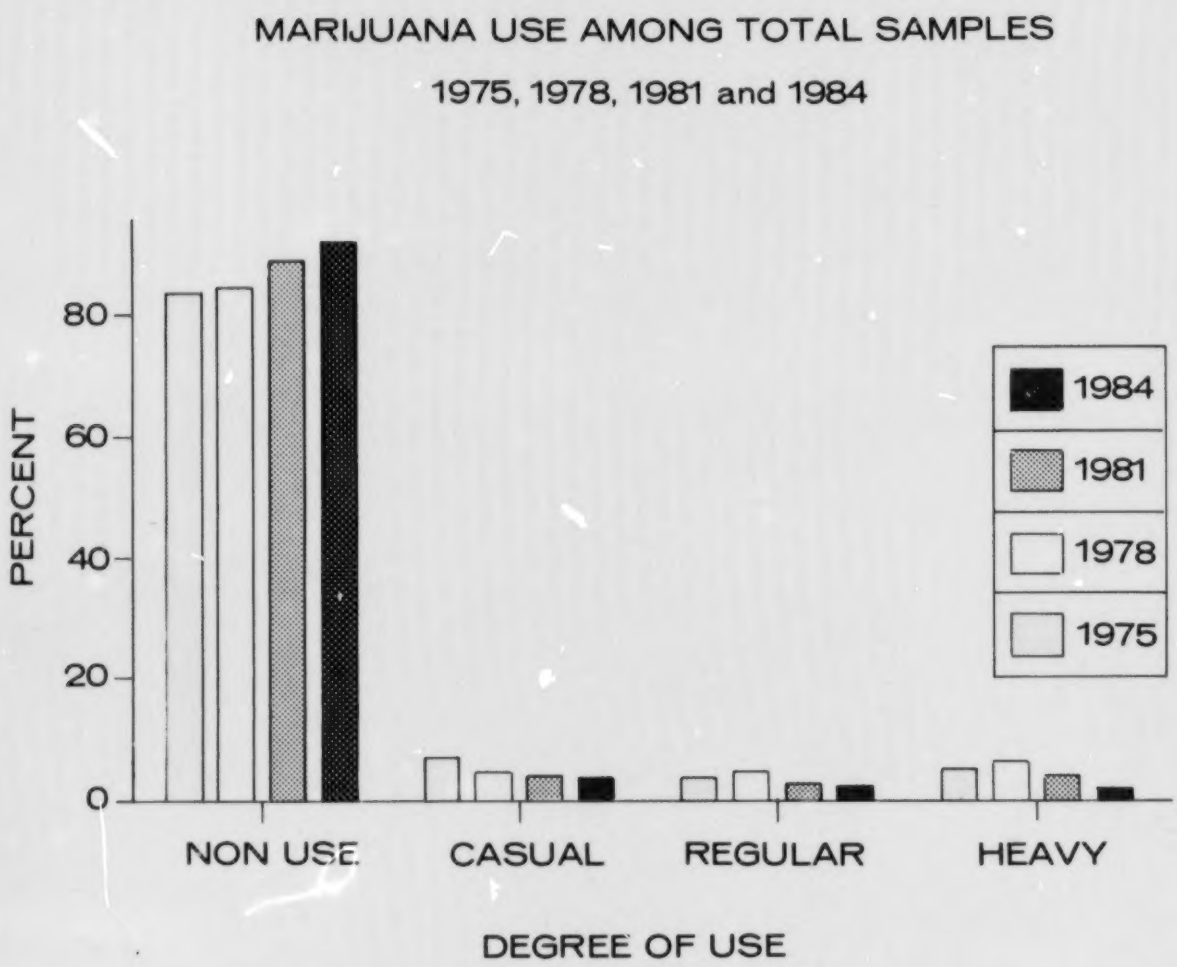
		Total	6th Grade	8th Grade	10th Grade	12th Grade
Nonuse	1975	83.5	98.2	87.2	77.5	66.3
	1978	84.5	99.3	89.6	78.1	72.7
	1981	89.1	98.4	93.3	84.9	77.8
	1984	92.0	98.8	96.2	89.1	84.9
Casual	1975	7.4	1.6	6.7	11.0	13.0
	1978	4.6	.6	3.3	5.4	8.4
	1981	4.0	.7	2.7	5.8	7.7
	1984	3.5	.4	1.8	4.9	6.5
Regular	1975	3.9	.1	3.5	5.8	7.4
	1978	4.7	0.0	4.6	6.5	6.7
	1981	2.8	.2	1.8	4.9	4.9
	1984	2.5	.4	1.3	3.4	4.5
Heavy	1975	5.1	.1	2.6	6.7	13.4
	1978	6.2	.1	2.6	10.1	12.0
	1981	4.0	.6	2.2	4.4	9.7
	1984	2.0	.4	.7	2.6	4.1

An overview of Table 21 indicates that 1.2 percent to 15.1 percent of the 1984 sample were currently using marijuana. Marijuana use increased with each increase in grade level. The largest increase in the number of casual, regular and heavy users of marijuana seemed to occur between eighth and 10th grades.

A comparison of data from 1975, 1978, 1981 and 1984 discloses a continuing downward trend in the use of marijuana across all grade levels. This downward trend is most noticeable for casual and heavy use among eighth, 10th and 12th grade students.

Figure B depicts the general trends in marijuana use among total samples in 1975, 1978, 1981 and 1984. The graph portrays a continuing decline in the number of marijuana users. Actual data in Table 21 indicate a large increase between 1975 and 1984 in the percentages of eighth grade (9 percent) 10th grade (11.5 percent) and 12th grade (18.5 percent) students who reported themselves to be nonusers of marijuana. The graph also illustrates the decline in the number of casual, regular and heavy users of marijuana.

Fig. B



Marijuana use patterns for male and female students are depicted in Table 22. The data indicate few differences between males and females in marijuana use patterns. Female students were somewhat more likely to be nonusers of marijuana. Male students were more often represented in the heavy use category. A decline in the casual, regular and heavy use of marijuana by both sexes is indicated by comparing data for the four study years. Nonusers increased by 6 percent in both the male and female samples between 1981 and 1984.

Differences in marijuana use patterns by school district categories are exhibited in Table 23.

The 1984 data denotes some marked differences in marijuana use among the four categories of school districts. The overall pattern was that marijuana use bacame less frequent with each decrease in the size of school districts/communities. Most casual and heavy users of marijuana were from urban schools. Semiurban schools appeared to have the greatest percentage of regular using students.

When data from 1975, 1978, 1981 and 1984 are compared, all categories of school districts demonstrate a continuing decline in the casual, regular and heavy use of marijuana. Comparisons of 1975 and 1984 data reveal that the largest decrease in casual use occurred in urban (5 percent) and semirural (5 percent) districts.

Table 22
Percent Male and Female Reporting Marijuana Use in 1975, 1978, and 1981

		Never Used	Ever Used	Casual	Regular	Heavy
Male	1975	80.8	*	9.0	4.3	6.0
	1978	84.0	24.3	4.8	4.3	7.0
	1981	78.7	21.3	4.1	3.5	5.7
	1984	85.0	15.0	3.6	2.6	2.7
Female	1975	86.3	*	5.9	3.5	4.3
	1978	84.9	20.3	4.4	5.1	5.6
	1981	81.1	18.9	4.8	3.3	2.7
	1984	87.2	12.8	3.5	2.3	1.4

*Unable to calculate due to wording of question in 1975

Table 23
Percentages of Student Samples Reporting Marijuana Use by District Size in 1975, 1978, 1981 and 1984

		Urban	Semiurban	Semirural	Rural	Total
Nonuse	1975	78.6	82.9	83.9	86.9	83.5
	1978	76.9	84.3	87.1	88.0	84.5
	1981	82.6	89.7	90.5	91.7	89.5
	1984	87.3	89.4	93.3	95.2	91.9
Casual	1975	9.8	6.7	6.3	6.7	7.4
	1978	5.4	5.9	4.1	3.8	4.6
	1981	5.8	3.5	4.2	3.2	3.9
	1984	4.8	4.5	3.0	2.5	3.5
Regular	1975	5.8	3.7	3.3	3.0	3.9
	1978	8.3	2.8	4.2	3.5	4.7
	1981	4.9	2.4	2.2	2.5	2.8
	1984	3.5	4.1	2.0	1.3	2.5
Heavy	1975	5.7	6.6	6.5	3.3	5.1
	1978	9.5	6.9	4.6	4.7	6.2
	1981	6.9	4.4	3.2	2.8	3.8
	1984	4.4	2.0	1.7	1.0	2.1

Question 57 asked students, "When you are 21 years old, how often do you think you will use marijuana?" The responses are described in Table 24.

Approximately 93 percent of the students did not intend to use marijuana at age 21. Almost 12 percent of the 12th grade students expected to use marijuana at age 21. In 1981 nearly 19 percent of the 12th grade students intended to use marijuana when they were 21 years old.

Table 24
Students' Intentions to Use Marijuana at Age 21

	6th Grade	8th Grade	10th Grade	12th Grade	Total Sample
I will not use marijuana	97	96	90	88	93
About once a month	1	2	5	6	4
About once each week	.5	1	2	2	1
About 2 or 3 times each week	.5	.5	2	2	1
About every day	.5	.5	1	2	1

*Numbers in parentheses represent percentages of the 12th grade sample reporting actual marijuana use

The relevant findings concerning marijuana use and nonuse include:

- A majority of Iowa students (65-97 percent) had not tried marijuana.
- Fewer students at each grade level had tried marijuana in 1984 as compared to 1975, 1978 and 1981.
- The greatest increase in the number of casual, regular and heavy users of marijuana seemed to occur between eighth and 10th grades.
- Students were using marijuana less frequently in 1984 as compared to 1975, 1978 and 1981. This indicates a continuing downward trend in marijuana use.
- Female and male students used marijuana at nearly the same frequency. Males were slightly more likely to be heavy users.
- Casual and heavy marijuana use was more common among urban youth.
- Marijuana use appeared to be less frequent with each decrease in the size of school districts/communities.
- Marijuana use decreased in frequency in all four categories of school districts with the exception of a slight increase in regular use among semiurban students.
- Approximately 93 percent of the students in the 1984 study said they did not intend to use marijuana at age 21.

4. Other Drug Use and Nonuse

The age of onset for other drug use was assessed by asking students, "How old were you when you *first* tried drugs ('downers,' 'uppers' and/or 'hallucinogens' like LSD)?" Responses to this question are revealed in Table 25. Few students (approximately 2-20 percent) have tried other drugs. Evidently the 13 to 16 age range was the period of greatest experimentation with other drugs. Only 1.8 percent of the total sample reported trying other drugs by age 12 in 1984 as compared to 6.8 percent of the total sample in 1981.

Approximately 19 percent of the 12th grade students in 1984 had tried other drugs as compared to 21 percent in 1981, 18 percent in 1978 and 11 percent in 1975.

Another treatment of the 1984 data reveals that 14 percent of urban youth, 11 percent of semiurban youth, 9 percent of semirural youth and 7 percent of rural youth had tried other drugs by age 18. This indicates that the larger the school district, the more likely that students would try other drugs and begin their use at an earlier age.

Table 25
Age of Onset for Other Drug Use by Grade Levels

	Never Tried Other Drugs	Tried Drugs by Age 12	Tried Drugs by Age 14	Tried Drugs by Age 16	Tried Drugs by Age 18
6th Grade	97.9	1.6 (2.0)			
8th Grade	96.0	2.0	3.5 (3.9)		
10th Grade	87.5	2.1	8.3	12.1 (12.5)	
12th Grade	80.9	1.4	6.5	16.2	18.9 (19.2)

Table 26
Percentages of Grade Level Samples Reporting Other Drug Use in 1975, 1978, 1981, and 1984

		Total	6th Grade	8th Grade	10th Grade	12th Grade
Nonuse	1975	92.3	98.5	95.6	89.1	83.1
	1978	94.2	98.9	97.7	90.2	90.1
	1981	94.3	99.4	96.9	92.4	87.2
	1984	95.4	98.6	97.8	93.9	91.6
Casual	1975	5.1	1.0	3.7	7.1	10.0
	1978	3.1	.9	1.2	4.6	5.9
	1981	3.2	.5	1.8	4.8	6.8
	1984	2.4	.6	1.2	2.8	4.8
Regular	1975	2.0	.4	.5	2.9	4.9
	1978	2.0	.1	.9	3.7	3.5
	1981	1.7	.2	1.1	1.8	3.9
	1984	1.2	.3	.6	1.9	2.0
Heavy	1975	.6	.1	.2	.6	1.9
	1978	.6	0.0	.1	1.5	.5
	1981	.8	0.0	.3	1.0	2.1
	1984	1.0	.5	.4	1.4	1.7

Frequency of other drug use was represented by student responses to the question, "During an average month, how often do you usually use any amount of drugs such as 'downers,' 'uppers' or 'hallucinogens?'" Table 26 presents the findings for this question. The data indicate that very few students (approximately 5 percent) use other drugs. The frequency of other drug use increased with grade level. The greatest increase in regular and heavy use apparently occurred between eighth and 10th grades. The largest increase in casual use appeared to occur between 10th and 12th grades.

Comparisons of other drug use patterns between study years are difficult due to the small number of students represented in each use category. However, there did appear to be a trend toward less use of other drugs in 1984, particularly in the casual and regular use categories.

Figure C illustrates the trends in other drug use during 1975, 1978, 1981 and 1984. The graph clearly portrays the small number of students who reported themselves to be users of other drugs.

Table 27 implies that very few differences in drug use patterns for female and male students existed in 1984. Male and female use patterns for other drugs were almost identical.

Fig. C

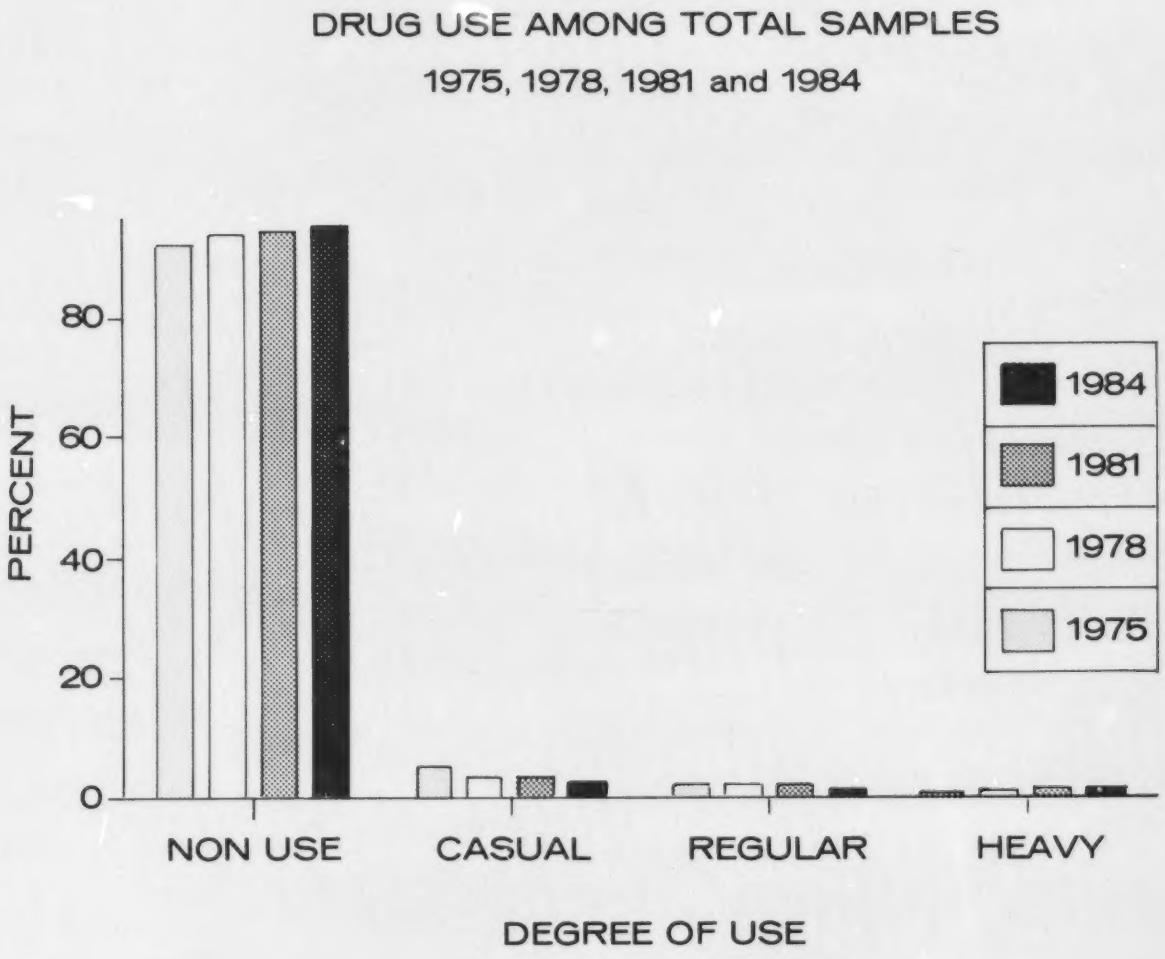


Table 27
Percent Male and Female Reporting Other Drug Use in 1975, 1978, 1981 and 1984

		Never Used	Ever Used	Casual	Regular	Heavy
Male	1975	92.1	*	5.8	1.6	.5
	1978	94.4	10.3	3.3	1.9	.5
	1981	88.3	11.7	3.8	2.0	1.0
	1984	91.0	9.0	2.5	1.4	1.0
Female	1975	92.5	*	4.4	2.3	.8
	1978	94.1	9.4	2.9	2.2	.8
	1981	88.6	11.4	3.6	1.5	1.0
	1984	90.7	9.3	2.3	1.1	1.0

*Unable to calculate due to wording of question in 1975

Table 28
Percentages of Student Samples Reporting Drug Use By District Size in 1975, 1978, 1981 and 1984

		Urban	Semiurban	Semirural	Rural	Total Sample
Nonuse	**1975**	91.7	91.2	92.0	93.4	92.3
	1978	94.2	94.1	95.5	93.7	94.2
	1981	93.2	94.0	94.9	94.6	94.2
	1984	92.6	95.0	95.7	96.8	95.3
Casual	**1975**	6.0	5.9	5.0	4.1	5.1
	1978	3.3	2.5	2.8	3.3	3.1
	1981	4.5	3.5	3.2	2.7	3.2
	1984	3.6	2.6	2.6	1.5	2.4
Regular	**1975**	1.6	2.4	2.2	1.8	2.0
	1978	1.6	2.5	1.1	2.6	2.0
	1981	1.6	2.1	1.3	1.7	1.7
	1984	2.1	1.4	1.0	.9	1.3
Heavy	**1975**	.7	.6	.9	.6	.6
	1978	.8	.8	.6	.5	.6
	1981	.6	.6	.7	1.2	.9
	1984	1.6	1.1	.8	.7	1.0

Table 28 reveals a pattern in 1984 of more use of other drugs among urban and semiurban students than was apparent for students in semirural and rural schools. These differences between school samples were very small for each of the casual, regular and heavy use categories.

Comparisons between district categories and use patterns imply a general decrease in the casual and regular use of other drugs (1975 vs. 1984). The regular and heavy use of other drugs appears to increase slightly for urban students in 1984 as compared to other study years.

The data regarding other drug use and nonuse suggest the following summary:

- Very few (2-20 percent) youth had tried other drugs and very few (5 percent) continued to use them.
- Most experimentation with other drugs appeared to occur between age 13 and 16.
- Fewer students had tried other drugs in 1984 than had students in 1981.
- The largest increase in regular and heavy use of other drugs occurred between eighth and 10th grades.
- Patterns for other drug use were nearly identical for female and male students.
- More students use other drugs in urban and semiurban schools than in semirural and rural schools.
- Only 1 percent of each student sample fit the heavy use pattern for other drugs.

5. Polysubstance Use and Nonuse

Data on polysubstance use provide a perspective on the number of students who use two or more substances concurrently. This section of the report discusses the percentages of grade level samples and total samples which reported nonuse (never and stopped) and use (casual, regular and heavy) of alcohol, marijuana and other drugs. The computer sorted data and counted frequencies according to the following scheme:

Nonuse of any substance (alcohol, marijuana or other drugs)
Alcohol use only (nonuse of marijuana and other drugs)
Marijuana use only (nonuse of alcohol and other drugs)
Drugs only (nonuse of alcohol and marijuana)
Alcohol and marijuana (nonuse of other drugs)
Alcohol and other drug use (nonuse of marijuana)
Marijuana and other drug use (nonuse of alcohol)
Use of all substances

There were eight possible categories for the polysubstance analyses. Very few students fit the "drug only" and "marijuana and other drugs" categories, so these data are omitted from the tables.

Table 29 indicates that among 12th grade students, 22.2 percent did not use any of the substances; 61 percent used alcohol only, 8.3 percent used alcohol and marijuana only, and 6.3 percent used all substances.

Table 29 describes polysubstance use by grade levels in 1984 and 1981. The number of students in 1984 who reported nonuse of any substance decreased from 80 percent in sixth grade to 22 percent in 12th grade. "Alcohol only" accounted for the largest group of substance users in each grade level. Very few students at any grade level fit the categories of "marijuana use only" or "drug use only." The most frequently reported substance use combinations were "alcohol and marijuana" followed closely by "use of all substances." Slightly more than 3 percent of all students in the 1984 study reported using all substances.

Comparisons of 1981 and 1984 data reveal an increase in the number of students who were nonusers of any substance. The most apparent decrease in substance use in 1984 occurred for "alcohol and marijuana" and "use of all substances" among eighth grade, 10th grade and 12th grade students. Sixth and eighth grade students were less frequently represented in the "alcohol only" category in 1984 than were their counterparts in 1981. The number of 10th and 12th grade students in the "alcohol only" category increased in 1984.

Polysubstance use in the total sample is presented for 1975, 1978, 1981 and 1984 in Table 30. The 1984 data show an increase in the number of students who were nonusers of any substance. The 1984 data also reflect a continuation of a downward trend in "alcohol and marijuana" use and "use of all substances." No change was observed in "alcohol only" use over the four studies.

Table 31 contrasts polysubstance use patterns in the four categories of school districts. "Nonuse of any substance" appeared to be most frequent in semirural and rural districts in 1984. "Alcohol only" seemed to occur most frequently in rural districts and least frequently in urban districts. "Use of all substances" was most frequently reported by urban students and least frequently reported by rural students. The combined use of "alcohol and marijuana" was most frequently reported by semiurban and urban students.

Comparisons of 1981 and 1984 data depict a decrease in the use of "alcohol and marijuana" and the "use of all substances" among students in all four school district categories. Fewer semirural and rural students were "alcohol only" users in 1984 than were their counterparts in 1981. More urban students in 1984 were represented in the "alcohol only" group than were urban students in 1981.

Table 29
Polysubstance use in 1981 and 1984 by Grade Level

		Nonuse of Any	Alcohol Only	Marijuana Only	Alcohol and Marijuana	Alcohol and Other Drugs	Use of All Substances
6th Grade	1981	73.0	25.0	.3	1.1	.3	.1
	1984	80.2	17.9	0	.3	.3	.1
8th Grade	1981	52.6	40.5	.5	3.3	.6	2.6
	1984	58.0	37.7	.3	1.8	.4	1.6
10th Grade	1981	32.4	50.0	.3	8.9	1.3	6.9
	1984	34.6	53.0	.6	5.7	1.5	4.3
12th Grade	1981	20.5	55.9	.4	11.0	1.4	10.4
	1984	22.2	60.9	.2	8.3	1.6	6.3

Table 30
Polysubstance Use Among Total Samples During 1975, 1978, 1981 and 1984

	Nonuse of Any	Alcohol Only	Marijuana Only	Alcohol and Marijuana	Alcohol and Other Drugs	Use of All Substances
1984	47.6	43.3	.3	4.2	1.0	3.3
1981	44.9	43.7	.3	5.4	.9	4.7
1978	31.1	44.0	.9	14.9	.5	8.5
1975	39.1	43.7	.3	9.3	.7	6.7

Table 31
Polysubstance Use within Various Sized School Districts in 1981 and 1984

		Nonuse of Any	Alcohol Only	Marijuana Only	Alcohol and Marijuana	Alcohol and Other Drugs	Use of All Substances
Urban	1981	42.6	37.6	1.0	10.8	1.1	6.8
	1984	46.0	40.7	.7	5.7	1.1	5.4
Semi-urban	1981	43.2	41.7	.4	7.1	1.4	6.0
	1984	47.0	41.3	.6	6.1	.9	3.6
Semi-rural	1981	44.0	45.7	.1	5.1	.7	4.5
	1984	49.5	42.7	.2	3.5	1.3	2.8
Rural	1981	43.5	47.7	.1	3.6	.8	4.2
	1984	47.9	46.3	.0	2.6	.8	2.1

6. Summary of Findings for Substance Use and Nonuse

Detailed summaries of the use and nonuse of specific substances were presented earlier. Some very broad observations are reported here:

- The frequency of substance use appeared to be a function of age, availability and opportunity. Substance use appeared to increase in frequency with each increase in age.
- Intent to use substances as an adult seemed to increase with each increase in grade level.
- The substance use patterns of female and male students were very similar.
- Data in 1984 seemed to verify a trend toward less student substance use following a peak substance use year of 1978.
- The age of onset data for 12th grade students indicates that a ranking of substances by "ever tried" is plausible. For 12th grade students, 95 percent had tried alcohol, 68 percent had tried tobacco, 35 percent had tried marijuana, and 19 percent had tried other drugs.
- Data comparisons between different categories of school districts suggest that substance availability and user anonymity are important factors. For example, marijuana use and polysubstance use were most frequent in urban districts and least frequent in rural districts. "Alcohol only" use was more frequent in rural districts than it was in urban districts.
- "Heavy use" of substances involved a large number of Iowa youth in 1984.

  Projections for 12th grade based on an enrolled population of 40,528 include:

  5,877 heavy users of alcohol (14.5 percent norm)
  3,648 heavy users of tobacco (9 percent norm)
  1,621 heavy users of marijuana (4 percent norm)
  689 heavy users of other drugs (1.7 percent norm)

Projections for 10th grade based on an enrolled population of 41,947 include:

2,936 heavy users of alcohol (7 percent norm)
2,517 heavy users of tobacco (6 percent norm)
1,258 heavy users of marijuana (3 percent norm)
587 heavy users of other drugs (1.4 percent norm)

"Use of all substances" (marijuana, alcohol and other drugs used concurrently) also involved many Iowa youth in 1984.

2,553 polysubstance users projected for 12th grade based on an enrolled population of 40,528 and 6.3 percent norm.

1,804 polysubstance users projected for 10th grade based on an enrolled population of 41,947 and 4.3 percent norm.

IV. External Influences on Substance Use and Nonuse Behaviors

Questions 59-64 provide a broad perspective on external influences on youth substance use and nonuse. Student responses on these questions are presented first as background for the more specific findings concerning the influence of family, peers and schools on youth substance decisions.

Questions 60-63 asked students to identify the persons who had most influenced their decisions not to use substances. Students responded to the question, "Who, on the following list of people, have most influenced your decision to *not* use alcohol, tobacco, marijuana or other drugs?" Table 32 shows the percentages of the nonuser groups who matched a specific person with the nonuse of a specific substance.

Among nonusers of substances, parents were perceived to exert the most influence on substance decisions (57-65 percent). The second, third and fourth most important sources of influence appeared to be friends, health teachers and siblings. School nurses and clergy seemed to exert the least influence.

The data does not suggest a specificity for "influencers." Parents were consistently perceived as the most important source of influence to not use alcohol, tobacco, marijuana and other drugs. Friends, health teachers and siblings also were perceived to have a consistent and general influence regardless of substance.

The data from questions 60-63 were also clustered by grade levels. Comparison of sixth grade responses with 12th grade responses indicates that school nurses, school counselors, health teachers, police officers and counselors from an alcoholism/drug treatment center all decreased in their relative influence on students' nonuse of substances. Parent influence remained high and consistent across grade levels. Only the percentage of students selecting peer (friend) influence increased with each increase in grade level. Apparently, peers exert a recognized influence on the nonuse of alcohol, marijuana, tobacco and other drugs.

Question 64 attempted to assess a less direct source of influence, the credibility of information sources. Table 33 describes student responses to the question, "Where did you get the information which is most important to you about alcohol and other drugs?"

Students ascribed the most importance to substance information they received from parents, school teachers and friends. This ranking matched the ranking for perceived influences as reported in Table 32. Similar comparisons can be made between the ranking for siblings, counselors from alcoholism/drug treatment centers, police and school counselors in both tables. Police and school counselors were least often selected on both questions.

Some grade level trends are apparent in Table 33. Parents and classroom teachers became less important sources of information with each increase in grade level. There was an increase in the perceived importance of information attributed to friends, substance users and personal experience with each increase in grade level.

The importance of media sources of information was also indicated in Table 33. Print and broadcast media were chosen slightly less often than parents as important sources of information. The school was the primary source for books, magazines and pamphlets for most students. This observation is relevant when considering a school's overall influence on students' substance use decisions.

Table 32
Perceived Influences on Substance Nonuse Decisions in 1984

	To Not Use Alcohol	To Not Use Tobacco	To Not Use Marijuana	To Not Use Other Drugs
Your parents	65	60	62	57
Your friends	8	13	12	13
A health teacher	7	12	8	10
Your brother/sister	5	6	5	5
A counselor from an alcohol/drug treatment center	5	2	4	6
A minister, priest, or rabbi	2	1	2	3
A police officer	3	1	3	3
A school nurse	2	3	1	2
A school counselor	2	2	2	2
Percent Total Sample Nonusers	81	93	97	98

Table 33
Most Important Source of Information about Substances (Percent of Grade Level Samples)

	6th Grade	8th Grade	10th Grade	12th Grade	Total Sample
Talking with parents	29	21	15	13	19
School classroom teacher	13	13	9	8	11
Friends	6	9	14	16	12
Someone who is now using alcohol or drugs	3	4	7	8	6
Personal experience	2	3	8	12	6
Brothers or sisters	4	5	6	5	5
Counselor from an alcoholism/drug treatment center	5	5	4	4	4
School assembly	5	8	8	7	7
Police or other law enforcement person	6	4	3	3	4
School counselor	3	2	1	1	2
Books, magazines, or pamphlets	11	14	14	14	13
TV or radio	13	12	11	9	11

Table 34 reports data regarding trust in communications about substances. The question read, "If you had a problem with alcohol or other drugs and you wanted to talk with someone about it, where would you most likely go for help?"

A close friend and parents were most often chosen as sources of help for a substance problem. A close friend was more frequently chosen as a source of help with each increase in grade level. The opposite trend was true for parents/guardians. "Don't know where I would go," was consistently the third most often chosen response. School persons, clergy and the family doctor consistently ranked at the bottom of the list as possible sources of help.

One way to summarize the data on external influences is to compare total frequencies of selection for various persons. These comparisons suggest:

Parents consistently rank first as influences not to use substances and as the most important source of information. Parents rank second to peers as a source of help.

Peers rank third as influences not to use substances, third as a source of information and first as a source of help.

School persons (teacher, nurse and counselor) rank second as influences not to use substances, second as a source of information, and seventh (out of nine choices) as a source of help.

Siblings rank fourth as influences to not use substances, sixth as a source of information and fifth as a source of help.

The remainder of this report describes findings about parent, peer and school influence on youth substance decisions.

Table 34
Perceived Sources of Help
for Substance Problem by Grade Level

	6th Grade	8th Grade	10th Grade	12th Grade	Total Sample
A close friend	29	39	49	53	43
Parents or guardian	34	21	14	12	20
Don't know where I would go	9	11	11	9	10
A crisis line or drug and/or alcohol treatment center	11	9	6	6	8
Brother, sister, or other young relative	4	8	9	9	7
A trusted adult (not mentioned above)	3	5	5	5	5
A school counselor or teacher	5	5	4	3	4
Minister, priest, rabbi	3	3	2	2	2
Our family doctor	2	1	1	1	1

1. Parent Influence

Several questions in the survey related to parental influence on student substance use or nonuse. For convenience, data are organized according to parent attitudes toward alcohol and marijuana (questions 8-9); parent guidelines regarding youth's use of alcohol, tobacco and marijuana (questions 10-12); and parent models of alcohol and tobacco use (questions 102-105). The data report is descriptive, and no attempt was made to correlate these items and student use or nonuse behaviors.

Questions 8 and 9 asked students to assess their parents' attitudes toward alcohol and marijuana. Students responded to the questions:

"Would your parents/guardians agree or disagree with this statement about alcohol? Frequent use of alcohol can cause serious physical and psychological harm?"

"Would your parents/guardians agree or disagree with this statement about marijuana? Frequent use of marijuana can cause serious physical and psychological harm.

Table 35 indicates that a large majority of youth perceive that their parents believe alcohol and marijuana use can be harmful. Students perceive their parents to have particularly strong negative attitudes toward marijuana. Only 6 percent of the students reported pro-alcohol views and only 4 percent of the students reported pro-marijuana views for their parents. Fourteen percent of the students disclosed that they did not know what their parents' attitudes toward alcohol were. About 5 percent of the students did not know what their parents' attitudes toward marijuana were.

Table 35
Parental Attitudes
Toward Alcohol and Marijuana

	Parent Alcohol Attitudes	Parent Marijuana Attitudes
Parents would strongly agree	40	73
Parents would agree	38	17
Parents would disagree	4	1
Parents would strongly disagree	2	3
Parents would not be sure	2	1
I don't know what their opinion would be	14	5

Questions 10-12 asked students to assess their parents' guidelines regarding the youth's use of alcohol, tobacco and marijuana. The questions were phrased as follows:

"What are your parents' feelings about your alcohol use?"

"What are your parents' feelings about your tobacco use?"

"What are your parents' feelings about your use of marijuana...pot, grass?"

Student responses to these questions are summarized in Table 36. The first row of data in the table indicates the percentage of the total sample which reported being nonusers of each of the substances. Data appearing in the remainder of the table are percentages computed on *user* responses. These data represent what users of alcohol, tobacco and/or marijuana perceived to be their parents' guidelines for such use.

Table 36
Parental Guidelines for Student Substance Use
(Percent of User Samples)

	Parents' Feelings-Alcohol	Parents' Feelings-Tobacco	Parents' Feelings-Marijuana
Percent of total sample nonuse	61	85	92
They don't know I drink/use...	35	65	
They know I use...but wish I did not	27	32	15
They think I drink/use... too much	2	3	1
They know I drink/use... and don't care	5	5	4
They expect me to not get into trouble when I...	17	15	2
I don't know how they feel	14	10	13

Approximately 36 percent of alcohol users, 35 percent of tobacco users and 65 percent of marijuana users reported that their parents did not know about their substance use. Another 10-14 percent of the users reported that they did not know how their parents felt about their substance use. The choices, "They know I use...but wish I did not" and "They think I drink/use...too much" were chosen by 29 percent of the alcohol users, 35 percent of the tobacco users and 16 percent of the marijuana users. The combined choices of "They know I drink /use... and don't care" and "They expect me to not get into trouble when I use..." were selected by 22 percent of the alcohol users, 20 percent of the tobacco users, and 6 percent of the marijuana users.

The majority (55 percent) of tobacco users reported that their parents knew about this behavior. Nearly 51 percent of the alcohol users and 22 percent of the marijuana users reported that their parents knew about the substance use.

Questions 102 and 103 asked students to estimate the frequency of parent tobacco use. Responses to these questions are summarized in Table 37. Also included in the table are data for the frequencies of tobacco use among the total 12th grade sample in 1984.

Some differences in tobacco use are notable from Table 37. Students reported that their mothers were less frequent tobacco users than their fathers. Fathers were more likely to have stopped smoking or to be heavy smokers than mothers. The sex differences in tobacco use were less apparent among boys and girls in the 1984 data (Table 22). The 1984 tobacco use patterns among 12th grade students were noticeably less than those of either parent model.

Questions 104 and 105 attempted to assess the frequency of alcohol use among parents. Responses are reported in Table 38.

Data in Table 38 imply that mothers are less frequent alcohol users than fathers. However, a greater percentage of mothers appeared to be occasional drinkers. The data indicate that fathers are more likely to be regular and heavy users of alcohol. Youth alcohol use was more similar to fathers' drinking patterns than mothers' drinking patterns. Twelfth grade youth, however, were more likely to be regular and heavy users of alcohol than either parent.

Table 37
Percentages of Total Sample Reporting Parent Use of Tobacco

	Mother Question 103	Father Question 102	Percentage of Grade 12 Reporting Use
Never smokes	58	32	65
Stopped smoking	12	22	18
1-6 times each week	6	8	6
7-25 times each week	5	7	2
4-10 times each day	9	11	5
More than 10 times each day	8	12	4
Parent not present in home	1	7	—

Table 38
Percentages of Total Sample Reporting Parent Use of Alcohol

	Mother Question 105	Father Question 104	Percentage of Grade 12 Reporting Use
Never drinks	30	14	14
Stopped drinking	5	8	9
Occasionally drinks	44	36	24
Few drinks each week	14	23	39
Two or more drinks each day	3	11	14
I don't know	2	2	
Parent not present in home	1	7	

2. Peer Influence

Questions about peer influence were prevalent throughout the youth survey. Sets of questions, however, were designed to assess peer modeling of substance use (questions 13-15) and peer norms/attitudes regarding substance use (questions 34-39). The first set of questions stated, "How many of your friends drink alcoholic beverages/smoke tobacco/smoke marijuana?" The second set of questions asked, "How do you think your close friends feel (or would feel) about you...?" in relationship to six common substance behaviors.

Table 39
Peer Use of Alcohol, Tobacco, and Marijuana in 1984

How many of your friends...		None	A few (one or two)	Some (three or four)	Many (five or more)
Question 13 drink alcoholic beverages?	Grade 6	74	19	4	3
	Grade 12	4	9	12	75
Question 14 smoke tobacco?	Grade 6	83	12	3	2
	Grade 12	30	32	19	20
Question 15 smoke marijuana?	Grade 6	93	4	1	1
	Grade 12	52	24	10	14

The data in Table 39 show an increase in the number of friends who use substances with each increase in grade level. This pattern held for each substance behavior and grade level. It became more and more likely that a student would encounter alcohol, tobacco and marijuana use among his/her peers and close friends as the student moved to each higher grade level.

The 1984 data indicate that it was very rare (4 percent of students) for 12th grade students not to have friends who used alcohol. Seventy percent of the 12th grade students reported having friends who smoked tobacco and 48 percent reported having friends who smoked marijuana. In 1981 nearly 98 percent of the 12th grade students reported having friends who used alcohol, 88 percent reported having friends who smoked tobacco and 60 percent reported having friends who smoked marijuana.

A closer inspection of the data for questions 13-15 reveals some grade levels at which exposure to peer substance use greatly increased. Peer use of alcohol increased from 26 percent to 61 percent between sixth and eighth grades, and from 61 percent to 93 percent between eighth and 10th grades. A similar comparison is possible for tobacco use between eighth grade students (34 percent reported tobacco use among friends) and 10th grade students (56 percent reported tobacco use among friends). The largest increase in peer use of marijuana seemed to occur between eighth grade (16 percent reported marijuana use among friends) and 10th grade (34 percent reported marijuana use among friends).

Comparisons of 1981 and 1984 data indicate that there were few changes in reported peer use of alcohol or tobacco. Reported peer use of marijuana was less in 1984 than in 1981. For example, 52 percent of 12th grade students in 1984 reported that none of their peers used marijuana as compared to 40 percent of 12th grade students in 1981 who gave this response.

Table 40 presents what youth perceived to be approved or disapproved substance behaviors among their peers. Students did not report strong peer approval of any of the six substance behaviors listed.

The 1984 data describe a general pattern of increased peer approval for each substance behavior with each increase in grade level. When responses are compared for each question it appears that, "getting drunk once or twice every week" (4-44 percent peer approval) and "taking 1-2 drinks every day" (8-24 percent peer approval) are the most likely of the six substance behaviors to be approved by peers. "Smoking marijuana" (3-20 percent peer approval) and "smoking one or more packs of cigarettes each day" (3-13 percent peer approval) were perceived to be the behaviors third and fourth most likely to be approved. The least often approved behaviors were "smoking marijuana regularly" (2-11 percent peer approval) and "trying another illegal drug such as cocaine or downers" (2-7 percent peer approval). A particularly salient finding from this data is that nearly 33 percent of 10th grade students and 44 percent of 12th grade students perceived that their peers would approve of getting drunk once or twice each week.

Comparisons of 1981 and 1984 data indicate a definite decline in perceived peer approval for each of the six substance behaviors. Students reported the greatest decline in perceived peer approval for the two marijuana behaviors listed. There were slight declines in perceived peer approval for the two alcohol behaviors described.

Table 40
Peer Norms Regarding Substance Use
(Percentage of Grade Level Samples)

		6th Grade	8th Grade	10th Grade	12th Grade	Total
Smoking marijuana	Approve	3	6	14	20	11
Smoking marijuana regularly (2 or more times each week)	Approve	2	4	8	11	7
Taking 1-2 drinks nearly every day	Approve	8	15	24	24	18
Getting drunk once or twice every week	Approve	4	11	33	44	24
Smoking one or more packs of cigarettes each day	Approve	3	7	11	13	9
Trying another illegal drug such as cocaine or downers	Approve	2	3	5	7	4

3. School Influence

Table 41 represents a summary of student responses to questions 83-86 on the 1984 survey. The percentages in the table are based on total sample data.

The six responses for each of questions 83-86 reflect several types of influence that school programs might exert. The choices, "decided to not use..." and "decided to stop using...," represent a direct positive influence of school programs. The choice, "already decided to not use...," represents an indirect positive influence of school programs; the program reinforced a preselected behavioral choice. The choices, "we have not talked about..." and "already decided to use," reflect a basically neutral position relative to program influence on substance behaviors. Finally, the choice, "decided to start or to use more...," indicate a negative influence of school programs. The findings on these questions indicate student perceptions of school program effects.

The data in Table 41 imply that school programs exerted some unique influences on each of the substance behaviors. According to student responses, school persons were most likely to discuss marijuana and other drugs in the classroom and least likely to discuss alcohol and tobacco. Responses also indicate that very few students had already chosen to use other drugs and marijuana. Conversely, a large group of students (43-45 percent) had already chosen not to use other drugs, marijuana and tobacco. Only 1 percent of the students reported that school programs influenced them to start using or to use more substances.

Apparently, school programs have influenced a large number of students (30-45 percent) not to use substances. School programs appeared to exert the most positive influence on other drug and marijuana behaviors and the least positive influence on alcohol behaviors. Few students (2-5 percent) reported that school programs had influenced them to stop using substances.

Comparisons of 1981 and 1984 data indicate an increase in the number of students who had already decided not to use substances. Approximately 8 percent more students in 1984 reported that they had already decided to not use other drugs, tobacco or marijuana.

Table 41
Perceived Impact of School Programs on Substance Behaviors for Total Sample

	Tobacco	Alcohol	Marijuana	Other Drugs	Over All Substances
Yes, decided to not use...	33	30	41	44	45
Yes, decided to stop using...	4	3	2	2	2
No, we have not talked about...	10	9	6	6	7
No, already decided not to use...	43	28	44	45	35
No, already decided to use...	9	28	6	3	10
No, decided to start or to use more...	1	1	1	1	1

Student responses on questions 83-86 were also clustered by grade levels. There were some obvious decreases in the percentages of students at each grade level who stated that the school program influenced them to not use substances:

- to not use alcohol...sixth grade-15 percent and 12th grade-10 percent
- to not use tobacco...sixth grade-47 percent and 12th grade-20 percent
- to not use marijuana...sixth grade-52 percent and 12th grade-29 percent
- to not use other drugs...sixth grade-52 percent and 12th grade-33 percent

The percentages of grade level samples that reported "already decided to not use..." the various substances increased with grade level (except for alcohol). These grade level increments are illustrated as follows:

- prior decision to not use alcohol...sixth grade-33 percent and 12th grade-22 percent
- prior decision to not use tobacco...sixth grade-35 percent and 12th grade-51 percent
- prior decision to not use marijuana...sixth grade-37 percent and 12th grade-51 percent
- prior decision to not use other drugs...sixth grade-37 percent and 12th grade-53 percent

In general, school programs appear to have the most positive influence on preventing marijuana and other drug use by youth. School programs also appear to have a strong positive influence on the nonuse of tobacco by youth. School programs have the least positive influence on the nonuse of alcohol.

4. Summary of External Influence Findings

Following is an outline of some of the more salient findings regarding the external influences of youth substance behaviors.

Parents

- Youth indicated that their parents were the most important source of influence on their substance nonuse decisions.

- Youth reported that their parents were the most important source of substance information and their second most likely source of help for a substance problem.
- A large majority of youth perceived that their parents believed alcohol and marijuana to have harmful effects.
- Youth who are substance users apparently receive a number of "mixed messages" from their parents about such behaviors.
- Reported patterns of tobacco use among 12th grade students were noticeably less than those of either their mothers or fathers.
- Reported patterns of alcohol use among 12th grade students were higher than those reported for either their mothers or fathers.

Peers

- Youth disclosed that their peers were the third most important source of influence on their substance nonuse decisions.
- Youth indicated that their peers were their third most important source of substance information and their most likely source of help for a substance problem.
- It was very likely that youth would associate with some friends/peers who used alcohol, tobacco, and marijuana.
- Peer modeling of tobacco, marijuana and other drug use was less frequent in 1984 than in 1981.
- Peer disapproval of some common alcohol, marijuana and tobacco behaviors decreased in frequency with each increase in grade level.
- Students did not report strong peer approval for any of the substance behaviors identified in the survey.
- Nearly 33 percent of 10th grade students and 44 percent of 12th grade students perceived that their peers would approve of "getting drunk once or twice each week."

Schools

- Youth indicated that school persons (teachers, nurse, counselor) were their second most important source of influence to not use substances.
- School persons were reported to be youths' second most important source of substance information and the seventh most likely source of help for a substance problem.
- School programs were reported to have had a positive influence on students' nonuse of other drugs, marijuana and tobacco.
- School programs were reported to have had the least positive influence on student alcohol use or nonuse.

Other

- Very few youth indicated that police and clergy had influenced their nonuse decisions.
- Police, clergy and family doctors were seldom chosen as a source of help or as an important source of substance information.

V. Personal Variables

Several questions are clustered under the category of personal variables. The questions were included in the youth survey to assess some internal influences on substance use or nonuse behavior. The questions also fit the categories of personal (adolescent) preferences and personal (adolescent) norms. Specifically, personal variable questions included:

Attitudes toward substances and substance behaviors (questions 16-33)
Substance knowledge (questions 68-81)
Motives for not using substances (questions 40-42)

Motives for using substances (questions 42-45)
Decision-making styles (questions 65-67)
Behaviors associated with nonuse (questions 88-93)
Behaviors associated with use (questions 94-99)

The results of personal variable questions are reported according to the format: overview of personal variables; alcohol behaviors and personal variables; marijuana behaviors and personal variables; and other drug behaviors and personal variables. The related behaviors section presents data relative to conforming and nonconforming behaviors. The last section presents a summary of the salient findings regarding personal variables.

1. Overview of Personal Variables

Questions 40-42 asked students what they thought were the two most important reasons for not using alcohol, not using marijuana and not using other drugs. Each question had eight possible responses. Five nonuse motives appeared among the eight possible choices for each substance. An additional group of four choices overlapped with two of the substance nonuse questions. Table 42 illustrates the overlap of nonuse motive choices between the three substance questions. The data are presented as percentages of the total 1984 sample.

Table 42
Overview of Motives for Not Using Substances
Percentages of Total Sample

	Not Using Alcohol	Not Using Marijuana	Not Using Other Drugs
They have better things to do	7	7	7
They don't like the way it makes them feel or behave	8	7	7
It's against their personal or religious beliefs	7	6	6
Is dangerous to their physical or mental health	19	36	32
There are too many risks of trouble with the police, employers, or school people	14	15	11
Their families disapprove	12	8	—
They don't like the people who use it	—	6	4
It's part of dropping out of life, something they don't want to do	—	15	11
They might become an alcoholic addicted to the other drugs	6	—	22
They might get into an accident and hurt someone	26	—	—

The data indicate that the total sample most often chose "...is dangerous to their physical or mental health" as the reason for not using alcohol (19 percent), marijuana (36 percent) and other drugs (32 percent). The response, "There are too many risks of trouble with the police, employers or school people" was frequently chosen for nonuse of alcohol (14 percent), marijuana (15 percent) and other drugs (11 percent). The three least often chosen reasons for not using substances were, "They have better things to do" (7 percent); "They don't like the way it makes them feel or behave" (7-8 percent); and "It's against their personal or religious beliefs" (6-7 percent).

The first and second most often chosen reasons for not using alcohol were, "They might get into an accident and hurt someone" (26 percent) and "alcohol use is dangerous to their physical or mental health" (19 percent).

The first and second most often chosen reasons for not using marijuana were, "Marijuana use is dangerous to their physical or mental health" (36 percent) and "It's part of dropping out of life..." (15 percent).

The first and second most often chosen reasons for not using other drugs were, "Other drug use is dangerous to their physical or mental health" (32 percent) and "They might become addicted to the other drugs" (22 percent).

The converse questions, reasons for using substances (questions 43-45), and their respective reponses are reported in Table 43. The choices for these questions represented important reasons for using alcohol, marijuana and other drugs. Four responses (reasons for using) were repeated in each of the three questions. Another set of four responses overlapped with two questions. Each substance use question had seven possible responses from which to select two. The questions read, "Check what you think are the *two* (2) most important reasons for people drinking/using marijuana/using other drugs."

Table 43
Overview of Motives for Using Substances
Percentages of Total Sample

	Not Using Marijuana	Not Using Other Drugs	Not Using Alcohol
They like the way _____ makes them feel	16	19	17
Because they don't have anything else to do	3	2	2
They don't see anything wrong with _____	16	8	7
Because their (families and) friends use _____	13	22	20
To have a good time with people	21	10	—
To forget about their problems or unhappiness	24	21	—
To feel more important and confident/better about themselves	8	—	11
It's part of trying new things (curiosity, adventure)	—	18	10
To deal with the stresses and pressures of everyday life	—	—	33

Table 43 implies that students considered, "Because their (families and) friends use...," to be a major reasons for using alcohol (13 percent), marijuana (22 percent) and other drugs (20 percent). Students seemed to consider, "To forget about their problems or unhappiness," to be an important reason for using either alcohol (24 percent) or marijuana (21 percent). The response, "They like the way.....makes them feel," was a frequently selected reason for using alcohol (16 percent), marijuana (19 percent) and other drugs (17 percent). The least frequently selected reason for using alcohol, marijuana and other drugs was, "Because they don't have anything else to do."

The first and second most frequently chosen reasons for using alcohol were, "To forget about their problems or unhappiness" (24 percent) and "To have a good time with people" (21 percent).

The first and second most frequently chosen reasons for using marijuana were, "Because their friends use marijuana" (22 percent) and "To forget about their problems or unhappiness" (21 percent).

The most frequently selected reasons for using other drugs were, "To deal with the stresses and pressures of every day life" (33 percent) and "Because their friends use the other drugs" (20 percent).

When Tables 42 and 43 are compared, some findings are evident. Many students perceive positive affective consequences ("feel good" or "feel better") from substance use. Students also perceive positive social sanctions ("Because their families/friends use" and "To have a good time with people") to be associated with the use of alcohol and/or marijuana. Some students, however, did perceive negative social sanctions (e.g. trouble with school, police or employers) as a consequence of alcohol, marijuana or other drug use.

Several questions attempted to assess student attitudes toward substances (questions 27-33) and substance behaviors (questions 16-26). Table 44 reflects some general attitudes students have toward substances (questions 29, 31 and 33 are reported on later pages).

An overview of Table 44 reveals some patterns in the data. A large majority (73-89 percent) of students at each grade level agreed with the idea that one shouldn't take pills or drugs unless they are given by a physician. Nearly 84 percent of the students disagreed with the idea of wishing for a pill that would make one feel better. Differences among grade levels were evident in attitudes sampled in questions 30 and 32. Fewer students agreed with the statement, "Fewer people would use drugs if there were more drug arrests," with each increase in grade level. By 12th grade, fewer students agreed than disagreed with the "arrests" statement. As grade levels increased, fewer students appeared to agree with the statement, "It is hard for a teen to say no when offered alcohol or marijuana."

Student attitudes toward specific substance behaviors were sampled in questions 16-26. These questions were divided into sets as follows: alcohol behavior question 16-19, smoking behavior questions 20-21, marijuana behaviors questions 22-23, and instrumental behavior questions 24-26. Instrumental behaviors were defined as substance use for a specific purpose. Total frequencies for very bad/bad were tabulated as "con" data and total frequencies for good/very good were tabulated as "pro" data for each set of substance behaviors (e.g., alcohol behaviors). These pro and con frequencies were computed as percentages of each grade level holding such attitudes for a specific set of substance use behaviors. The "pro" substance use data for each grade level in 1984 are reported in Table 45.

The data suggest an increase in pro-substance attitudes with each increase in grade level. Another pattern is also exhibited in the table: alcohol and tobacco attitudes were very similar across all grade levels. For example, 39 percent of 12th grade students had pro-alcohol use attitudes and 35 percent had pro-tobacco use attitudes. Students appeared to be most in favor of instrumental substance use (23-49 percent) and alcohol use (17-39 percent). Students appeared to least favor marijuana use (4-15 percent) and tobacco use (13-35 percent).

Student responses to the instrumental use questions are exhibited in Table 46. Some patterns are evident in this attitudinal data. Students considered the use of birth control pills more favorable than the use of a drug to lose weight or to help a nervous person relax. An increase in pro-use attitudes was most apparent between eighth and 10th grade students.

Table 44
General Student Attitudes Toward Substances
(Percent of Grade Level Samples)

			6th Grade	8th Grade	10th Grade	12th Grade	Total
27	I wish there were pills I could take to make me feel better when I get upset or afraid	Agree	14	15	18	17	16
28	You shouldn't take any kind of pills or drugs unless your doctor gives them to you	Agree	89	86	77	73	81
30	Fewer people would use drugs if there were more drug arrests	Agree	70	65	51	46	57
32	It is hard for a teen to say no when offered alcohol or marijuana	Agree	64	61	59	52	59

Table 45
Overview of Student Attitudes toward Substances
Percent of Grade Level Samples

	6th Grade	8th Grade	10th Grade	12th Grade	Total
Pro Alcohol	17	21	31	39	27
Pro Tobacco	13	21	29	35	25
Pro Marijuana	4	6	11	15	9
Pro Instrumental	23	33	44	49	38
Pro Combined	16	22	31	37	26

Table 46
Student Attitudes Toward Instrumental Substance Use
Percent of Grade Level Samples

			6th Grade	8th Grade	10th Grade	12th Grade	Total
24	Use of a drug to help a nervous person to relax.	Pro	14	19	25	30	23
25	Use of birth control pills.	Pro	31	48	67	79	57
26	Using a drug to lose weight.	Pro	23	32	39	38	33

Questions 68-81 attempted to sample student knowledge about substances and substance laws. Table 47 represents the percentage of students who correctly answered each question at each grade level. The topic of each question is described in the table. Questions 68-76 followed a multiple-choice format with four possible answers and the option to respond, "I don't know." Questions 77-81 were true-false questions and also included the option "I don't know."

Table 47 describes some patterns in student knowledge. Students were more likely to answer questions correctly with each increase in grade level. Of the multiple choice questions, students most frequently knew the correct response concerning, "smoking and pregnancy," "tolerance for a substance" and "drinking and driving." Students were least often correct in answering the questions about "psychological dependence" and "amphetamine effects on the heart." Student responses to the true-false questions reveal that they most often knew the correct answer to questions concerning "antihistamine/alcohol interactions" and "harmful effects of marijuana."

Table 47
Substance Knowledge by Grade Level*
(Percent Correct)

	6th Grade	8th Grade	10th Grade	12th Grade	Total
68 **Smoking and pregnancy**	27	48	57	63	50
69 **Alcohol is a depressant drug**	7	16	36	52	29
70 **Amphetamines and effects on heart**	9	13	20	28	18
71 **Barbituate and tranquilizer effects**	6	19	34	44	27
72 **Tolerance for a substance**	16	40	62	71	49
73 **Intoxication level**	7	24	60	73	43
74 **Drinking and driving**	19	35	62	75	49
75 **Minor's consent for treatment**	11	24	33	41	28
76 **Psychological dependence**	9	7	7	8	8
77 **Implied consent law**	29	38	51	60	45
78 **Method to sober up**	17	31	68	83	51
79 **Alcohol metabolism**	26	38	59	69	49
80 **Interactions with alcohol**	44	61	75	80	66
81 **Harmful effects of marijuana**	60	65	70	75	68

*Questions 68-76 were multiple choice questions with 5 possible choices and questions 77-81 were true-false questions.

2. Alcohol Behaviors and Personal Variables

This section focuses on motives for not using and using alcohol, general attitudes toward alcohol, attitudes toward specific alcohol use behaviors and decision making in two alcohol-use situations. The section is designed to indicate how personal variables might affect alcohol use or nonuse.

Motives for not using alcohol were assessed through question 40, "Check what you think are the two most important reasons for people not drinking." The data in Table 48 are arranged according to response frequencies for each of the eight possible choices. The first and second most frequently chosen reasons for not using alcohol were, "They might get into an accident..." and "alcohol is dangerous...." The two reasons decreased in frequency of choice with each increase in grade level. The response, "They might become an alcoholic," also decreased in frequency with each increase in grade level. Three responses, "There are too many risks...," "Drinking is against their personal..." and "They don't like the way it makes them feel...," increased in frequency with each increase in grade level. "Their families disapprove of drinking" remained fairly high in frequency of choice regardless of grade level.

Motives for using alcohol were sampled through question 43, "Check what you think are the two most important reasons for people drinking." Table 49 is listed according to the percentages of students selecting each of the seven possible responses.

Table 48
Motives for Not Using Alcohol

	6th Grade	8th Grade	10th Grade	12th Grade	Total
They might get into an accident and hurt someone	32	27	23	23	26
Alcohol is dangerous to their physical or mental health	24	23	16	12	19
Their families disapprove of drinking	11	12	13	12	12
There are too many risks of trouble with police, employers, or school people	8	12	18	18	14
Drinking is against their personal or religious beliefs	2	4	8	12	7
They don't like the way it makes them feel or behave	6	6	8	12	8
They might become an alcoholic	8	8	5	4	6
They have better things to do	7	7	8	7	7

Table 49
Motives for Using Alcohol

	6th Grade	8th Grade	10th Grade	12th Grade	Total
To forget about their problems or unhappiness	31	28	20	18	24
To have a good time with people	14	18	24	26	21
They like the way alcohol makes them feel	14	14	17	20	16
They don't see anything wrong with drinking	18	15	15	16	16
Because their families and friends drink	13	14	13	11	13
To feel more important and confident	9	9	8	6	8
Because they don't have anything else to do	3	2	2	3	3

The two most frequently selected reasons for drinking were, "To forget about their problems..." and "To have a good time with people." Two responses, "To have a good time with people" and "They like the way alcohol makes them feel," increased in frequency of selection with each increase in grade level. The two responses, "Don't see anything wrong..." and "Because their families and friends drink," were consistently chosen at similar frequencies regardless of grade level. The responses, "To feel more important and confident" and "...don't have anything else to do," were consistently chosen least often by students at each grade level.

Questions 31 and 33 were designed to assess general student attitudes toward alcohol. Table 50 reveals that most students (71-95 percent) disagreed with the statement, "Alcohol will help you to be more friendly and outgoing." The 19 percent of 10th grade and 29 percent of 12th grade students who agreed with this statement correspond well with the 24 percent of 10th grade and 26 percent of 12th grade students who chose, "To have a good time with people," as a most important reason for using alcohol.

A majority of students at each grade level agreed with the statement, "There is nothing wrong with drinking beer or wine." The percentage of students who agreed with the statement increased with each increase in grade level.

Questions 16-19 described some specific alcohol use and nonuse behaviors and asked students to judge whether they thought the behaviors were good or bad. Responses to the series of questions are reported in Table 51. Large majorities of students (84-95 percent) indicated that they feel drinking and driving is a bad behavior. Large percentages of each grade considered refusing a drink at a party a good behavior. The greatest contrast in grade level responses was to question 19. Drinking several alcoholic beverages at a party was an approved behavior among 10 percent of the sixth grade students and 64 percent of 12th grade students. Approximately 37 percent of the sixth grade students approved of drinking two or three alcoholic beverages after work, while 69 percent of 12th grade students approved of the behavior.

Questions 66 and 67 presented two situations that required an alcohol use and nonuse decision. Students were instructed to select one response they were likely to make in each of the following:

"Imagine that you stopped at a friend's house after school. None of your friend's family are home. Your friend takes two cans of beer out of the refrigerator and offers you one. What would you likely do?" (Question 66)

"Imagine that you and your friends are planning what you are going to do before and after a school dance. Two of your friends suggest having a few drinks before the dance, and then after an hour at the dance, go to an apartment for a party. What are you likely to do?" (Question 67)

Table 50
General Student Attitudes Toward Alcohol
(Percent of Grade Level Samples)

			6th Grade	8th Grade	10th Grade	12th Grade	Total
31	**Alcohol will help you to be more friendly and outgoing.**	Agree	5	9	19	29	16
33	**There is nothing wrong with drinking beer or wine.**	Agree	23	35	54	69	46

Table 51
Student Attitudes Toward Specific Alcohol Behaviors
(Percent of Grade Level Samples)

			6th Grade	8th Grade	10th Grade	12th Grade	Total
16	**Not accepting an alcoholic beverage at a party**	Good	84	90	92	94	90
17	**Drinking several (three or more) alcoholic beverages at a party**	Good	10	19	45	64	35
18	**Drinking two or three alcoholic beverages before driving**	Good	5	5	8	16	9
19	**Drinking two or three alcoholic beverages at home to relax after work**	Good	37	49	63	69	55

Student responses to the beer-at-a-friend's-home question are reported in Table 52. Responses to the alcohol-and-friends'-plans situation are presented in Table 53.

With the exception of sixth graders, the most frequently selected (28-59 percent) response to the beer-at-a-friend's-house situation was, "Take the can of beer and drink it." The second and third most frequently chosen responses were to "Refuse the can of beer, but stay there" and "Refuse the can of beer and ask for a soft drink." Very few students at any grade level selected, "Take the can of beer but not drink it" and "Offer an excuse for not taking the beer." The least popular response was "Refuse the beer and threaten to tell your friend's parents." Aside from 28 percent of sixth grade students, very few students chose the response of refusing the beer and going home.

Several grade level differences were apparent in student responses to the friends-alcohol-dance situation. Two responses which involved non-drinking modifications of the friends' plan were very infrequently chosen. Responses which required acquiescence to the friends' plan with limited drinking were chosen by 13 percent of the sixth grade students and 39 percent of the 12th grade students. A response which totally rejected the friends' plan and drinking was chosen by 57 percent of the sixth grade students and 18 percent of the 12th grade students. The percentage of students choosing "Go along with your friends' plan and get drunk" increased from 3 percent of sixth grade to 30 percent of 12th grade students. The number of students who would choose to go along with their friends but not drink remained fairly consistent (8-13 percent) across grade levels.

Table 52
Student Decisions Regarding Alcohol Use at Friend's Home

	6th Grade	8th Grade	10th Grade	12th Grade	Total
Refuse the can of beer, but stay there	14	17	17	16	16
Take the can of beer and drink it	9	28	50	59	38
Take the can of beer, but not drink it	4	5	3	2	3
Try to persuade your friend to not drink the beer	24	16	3	12	
Refuse the beer and go home	28	13	4	2	11
Refuse the beer and threaten to tell your friend's parents	5	2	0	0	2
Refuse the beer and ask for a soft drink	13	15	14	15	14
Offer an excuse for not taking the beer ("I don't like the taste" or "Dad will be angry")	4	6	4	3	4

Table 53
Student Decisions Regarding Alcohol Use in Group Situations

	6th Grade	8th Grade	10th Grade	12th Grade	Total
Refuse to go along with their plans, but go to the dance with your date	57	45	27	18	36
Go along with your friends' plan and get drunk	3	9	22	30	17
Have a few drinks with your friends before the dance and then remain at the dance	3	4	6	6	5
Refuse to drink before the dance but go to the party and limit your drinking	7	10	13	13	11
Offer to host a nondrinking party at your home after the dance	6	3	1	1	3
Go along with your friends' plan, but limit the number of drinks you have	3	8	14	20	11
Propose a nondrinking plan for the evening	10	8	6	4	7
Go along with your friends but not drink	11	13	11	8	11

3. Marijuana Behaviors and Personal Variables

This section includes data relevant to motives for not using and using marijuana, general attitudes toward marijuana, attitudes toward specific marijuana use or nonuse behaviors, and decision making in one marijuana use situation. It also describes some personal variables which might be related to marijuana use and nonuse.

Nonuse motives were assessed through student reponses to question 41: "Check what you think are the two most important reasons for people not using marijuana (pot, grass)." Students could choose from a list of eight possible responses. Response patterns to this question are reported in Table 54.

The most frequently selected reason for not using marijuana was "...is dangerous to their physical or mental health" (32-38 percent). The second most frequently chosen reason for nonuse was, "...too many risks of trouble...." The third most frequently selected reason for nonuse was, "It's part of dropping out of life...." There were very few differences between grade levels in response patterns for any of the nonuse reasons. The response, "Marijuana use is against their personal or religious beliefs," increased from 2 percent of sixth grade to 11 percent of 12th grade students.

Table 54
Motives for Not Using Marijuana

	6th Grade	8th Grade	10th Grade	12th Grade	Total
Marijuana is dangerous to their physical or mental health	38	37	35	32	36
There are too many risks of trouble with the police, employers, or school people	15	16	16	15	15
It's part of dropping out of life, something they don't want to do	19	17	13	12	15
Their families would disapprove	8	8	8	8	8
Marijuana use is against their personal or religious beliefs	2	4	7	11	6
They don't like the way it makes them feel or behave	6	6	6	8	7
They don't like the people who use it	5	6	7	7	6
They have better things to do	7	7	8	7	7

Question 44 identified motives for using marijuana: "Check what you think are the two most important reasons for people using marijuana (pot, grass)." The seven responses are listed by frequency of choice in Table 55.

The first and second most frequently selected reasons for using marijuana were, "Because their friends use marijuana" (19-27 percent) and "To forget about their problems or unhappiness" (17-24 percent). The third and fourth most often selected reasons for using marijuana were, "It's part of trying new things" (15-25 percent) and "They like the way marijuana makes them feel" (15-23 percent). The least frequently chosen reason for using marijuana was, "Because they don't have anything else to do."

Table 55
Motives for Using Marijuana

	6th Grade	8th Grade	10th Grade	12th Grade	Total
It's part of trying new things (curiosity, adventure)	15	16	25	21	18
Because their friends use marijuana	24	24	27	19	22
To forget about their problems or unhappiness	23	24	24	17	21
They like the way marijuana makes them feel	15	17	23	23	19
To have a good time with people	11	11	13	10	10
They don't see anything wrong with using marijuana	9	6	9	8	8
Because they don't have anything else to do	3	2	2	2	2

Only one question in the survey assessed general attitudes toward marijuana. Table 56 reports responses to this question. The data reveal a large difference between sixth and 12th grade students' attitudes toward experimentation with marijuana. Approximately 9 percent of sixth grade and 34 percent of 12th grade students agreed with the statement in 1984. Comparable figures for 1981 were 12 percent of sixth grade and 45 percent of 12th grade students agreeing with the marijuana experimentation statement.

Two questions described some common marijuana behaviors. Students were asked to judge each behavior as either good or bad. The findings for these attitudinal questions are reported in Table 57.

Very few students considered either "smoking marijuana at a party" or "using marijuana to relax" good behaviors. The number of students who approved either behavior increased with each increase in grade level. Students in eighth, 10th and 12th grades in 1984 were more disapproving of marijuana use than were their counterparts in 1981.

Question 65 dealt with peer influence to use marijuana. The question was: "What would you do if your friends began smoking marijuana and they kept pressuring you to smoke with them?" Students were provided with eight possible responses for this question. Data for question 65 are reported in Table 58.

The first and second most frequently selected responses were, "Try to get them to stop smoking marijuana" (20-28 percent) and "Find a new group of friends" (14-24 percent). The percentage of students who chose these responses decreased with each increase in grade level. The least frequently selected responses were, "Tell your parents..." (2-15 percent) and "Tell school people or police..." (0-6 percent). Two responses increased in frequency of selection with each increase in grade level. These responses were, "Say no, but still hang around with them" (from 8 percent to 25 percent) and "Avoid being with them when they smoke marijuana" (from 13 percent to 23 percent). Approximately 7 percent of the total sample selected the response, "Try smoking marijuana once and then stop." About 2 percent of sixth grade and 8 percent of 12th grade students indicated that they would yield to the peer influence and use marijuana.

Table 56
Students' General Attitude Toward Marijuana

				6th Grade	8th Grade	10th Grade	12th Grade	Total
29	There is no harm in taking marijuana once or twice to find out what it is like	Agree	1984	9	14	24	34	21
		Agree	1981	12	24	34	45	28

Table 57
Students' Attitudes Toward Marijuana Behavior
(Percent of Grade Level Samples)

				6th Grade	8th Grade	10th Grade	12th Grade	Total
22	Smoking marijuana at a party	Good	1984	4	6	12	17	10
		Good	1981	3	10	21	27	14
23	Using marijuana to relax	Good	1984	5	6	11	14	9
		Good	1981	3	11	18	23	13

Table 58
Student Decisions Regarding Marijuana Use in a Group Situation

	6th Grade	8th Grade	10th Grade	12th Grade	Total
Try smoking marijuana once and then stop	4	7	8	8	7
Start smoking marijuana with them	2	3	7	8	5
Say no, but still hang around with them	8	13	18	25	16
Avoid being with them when they smoke marijuana	13	17	20	23	18
Try to get them to stop smoking marijuana	28	26	25	20	25
Find a new group of friends	23	24	18	14	20
Tell your parents about the situation and follow their advice	15	9	3	2	7
Tell school people or police and let them take care of it	6	2	1	0	2

4. Other Substances and Personal Variables

This section reports findings about motives for using and not using other drugs, and attitudes toward specific tobacco use or nonuse behaviors. The 1984 survey was not designed to assess motives for using or not using tobacco nor did it include attitudinal questions related to specific drug use or nonuse behaviors. No decision making situations were presented for tobacco or other drugs.

Question 42 required students to, "Check what you think are the two most important reasons for people not using other drugs such as uppers, downers or hallucinogens." Responses to this question are described in Table 59.

The two most frequently selected reasons for not using other drugs, regardless of grade level, were, "Other drugs are dangerous to their physical or mental health" (31-32 percent) and "They might become addicted to other drugs" (21-23 percent). The two least frequently chosen reasons for not using other drugs, regardless of grade level, were, "They don't like the people who use other drugs" (2-5 percent) and "It's against their personal or religious beliefs" (3-10 percent). Two other choices remained consistently low in frequency of selection: "They don't like the way drugs make them feel or behave" (7-8 percent) and "They have better things to do" (6-7 percent). The first, second and third most frequently chosen reasons for not using other drugs in 1984 were indentical to the findings of the 1978 and 1981 surveys.

The motives for using other drugs were identified through question 45: "Check what you think are the two most important reasons for people using other drugs such as downers, uppers or hallucinogens." Students could select from seven possible responses. The patterns of student responses are reported in Table 60.

Regardless of grade level, students most often perceived that "dealing with the stresses and pressures of everyday life" was an important reason for using other drugs (31-35 percent). The second most frequently identified reason for using other drugs was, "Because their friends use the other drugs" (15-23 percent). This response decreased in frequency with each increase in grade

Table 59
Motives for Not Using Other Drugs

	6th Grade	8th Grade	10th Grade	12th Grade	Total
Other drugs are dangerous to their physical or mental health	32	32	31	32	32
They might become addicted to the other drug	23	22	21	21	22
There are too many risks of trouble with the police, employers, or school people	11	12	13	10	11
It's part of dropping out of life and they don't want to do that	14	12	10	10	11
It's against their personal or religious beliefs	3	4	7	10	6
They don't like the way drugs make them feel or behave	7	7	7	8	7
They have better things to do	7	7	7	6	7
They don't like the people who use other drugs	2	4	4	5	4

level. The third most frequently selected response was, "They like the way the other drugs make them feel" (13-21 percent). The percentage of students who chose this response increased with each increase in grade level. The two least frequently chosen responses, regardless of grade level, were, "They don't see anything wrong with using other drugs" (7-9 percent) and "Because they don't have anything better to do" (2-3 percent). Approximately 11 percent of the students selected the response, "To feel more important or better about themselves" and an average of 10 percent of the students selected the response, "It's part of trying new things."

Table 61 represents student judgments about two tobacco behaviors. Students' attitudes toward tobacco use apparently became more tolerant with each increase in grade level. Students appeared to be more tolerant of "Smoking after a meal" (18-43 percent) than they were of "Smoking tobacco while riding in another person's car" (8-26 percent). The most pronounced attitude change seemed to be for "smoking tobacco after a meal" since 18 percent of sixth grade and 43 percent of 12th grade students judged the behavior to be good/OK.

Comparisons of tobacco use attitudes in 1984 and 1981 are also reported in Table 61. Students in 1984 were less accepting of tobacco use, regardless of grade level, than were their grade cohorts in 1981.

Table 60
Motives for Using Other Drugs

	6th Grade	8th Grade	10th Grade	12th Grade	Total
To deal with the stresses and pressures of everyday life	31	35	33	33	33
Because their friends use the other drugs	23	22	18	15	20
They like the way the other drugs make them feel	13	14	17	21	17
It's part of trying new things (curiosity, adventure)	8	9	11	12	10
To feel more important or better about themselves	13	11	11	9	11
They don't see anything wrong with using other drugs	9	7	7	8	8
Because they don't have anything else to do	3	2	2	2	2

Table 61
Student Attitudes Toward Specific Tobacco Behavior
(Percent of Grade Level Samples)

Question #				6th Grade	8th Grade	10th Grade	12th Grade	Total
20	Smoking tobacco after a meal	Good	1984	18	28	38	43	32
		Good	1981	20	33	45	48	36
21	Smoking tobacco while riding in another person's car	Good	1984	8	14	21	26	18
		Good	1981	11	20	30	34	23

5. Related Behaviors

Other researchers have identified several behaviors which are associated with the nonuse of substances and several behaviors associated with the use of substances. Questions 88-93 asked students to estimate the number of times in the past month that they employed six types of conforming behaviors (negatively associated with substance use). Questions 94-99 required students to estimate the number of times in the last month that they had engaged in deviant behaviors (positively associated with substance use).

Table 62 represents the percentages of the total 1984 sample reporting conforming behaviors in the past month. Approximately 79-87 percent of the youth in the 1981 survey reported that they engaged in individual or team sports, outdoor activities and worked on a hobby in the past month. "Participation in youth clubs..." was the behavior least often (36 percent) reported in the survey. Nearly 70 percent of the 1984 sample reported participating in church activities one or more times in the past month. Participation in church activities was reported by 69 percent of the 1981 sample and 57 percent of the 1975 sample.

Participation in extracurricular activities at school was reported by 76 percent of the 1984 sample and 63 percent of the 1981 sample. Overall comparisons of the 1984 and 1981 results indicate increased participation of 1984 youth sample in four of the six conforming behaviors.

Table 62
Conforming Behaviors Reported
by Total 1984 Sample

How often in the last month...	Never	1 or 2 Times	3 to 5 Times	6 or more Times
Play individual or team sports like golf, tennis, or football	18	19	17	46
Do outdoor activities like fishing, hiking, or biking	13	30	24	33
Work on a hobby, collection or art project	21	33	21	25
Participate in church activities like church services, Sunday school, or youth groups	30	21	24	25
Participate in youth clubs like 4-H, scouting, or YMCA	64	19	9	8
Participate in extracurricular activities at school	24	23	18	35

Data in Table 63 represent responses to question 94-99 concerning deviant behaviors. The percentages were reported for the total 1984 sample with the exception of "driven a car after using alcohol or other drugs." Since more than half of the student sample could not legally drive, only 12th grade data were presented in the table. Table 63 reveals that many youth (84-96 percent) did not engage in five of the six deviant behaviors. The two behaviors which youth least often (1-3 percent) reported having done were theft of property worth more than $15 and the sale or distribution of substances. The most frequently reported deviant behaviors, excluding drinking and driving, were damaging public or private property (16 percent) and giving a teacher a fake excuse for being absent (16 percent).

Overall comparisons of the 1984 and 1981 results indicate a decrease in the 1984 sample's participation in three of the six deviant behaviors listed. The remaining three deviant behaviors did not appear to change between the two studies.

The data for 12th grade students indicates that driving a car after using alcohol or other drugs is common for that age group. Nearly 42 percent of the 12th grade students reported that they had driven while under the influence of a substance during the past month. The survey did not ask how often students had ridden in a car operated by a driver who had used alcohol or other drugs.

Fewer 12th grade students in 1984 (42 percent) reported having driven after using a substance than did 12th grade students in 1981 (49 percent).

Table 63
Deviant Behaviors Reported by Total 1984 Sample

How often in the last month...	Never	1 or 2 Times	3 to 5 Times	6 or more Times
Given a teacher a fake excuse for being absent	84	12	2	1
Taken little things (worth $15 or less) that didn't belong to you	87	10	2	1
Damaged public or private property	84	13	2	1
Driven a car after using alcohol or other drugs (12th Grade sample only)	58	27	10	5
Taken something worth more than $15 that didn't belong to you	95	3	1	1
Sold or distributed marijuana or other drugs	96	2	1	1

6. Summary of Findings for Personal Variables

A number of specific findings regarding motives for using and not using substances, substance knowledge, substance attitudes and associated behaviors were presented as personal variables which affect substance use and nonuse. Several trends or patterns appear in these data.

Functions of Age - Many personal variables appeared to change with age (grade level). Apparently, as Iowa youth become older:

- their attitudes toward substances and substance behaviors "softened." Youth became more tolerant or accepting of substance use.
- their knowledge of substances and substance effects increased.
- they became more aware of peer, parental and media influences on their personal substance use or nonuse.
- they were more likely to recognize their own personal and religious beliefs as a factor in substance use and nonuse.

Functions of Experience and Opportunity - Many personal variables were affected by experience and opportunity. Several pieces of data indicate that youth were more likely to experience substance use, either directly or indirectly, with each increase in grade level. It is very likely that these substance experiences and opportunities became more influential in personal substance use or nonuse decisions.

Function of Information - Most youth recognized the need for information about substances and the consequences of substance use. Data on sources of information indicate the relative credibility youth assign to information received from parents, school, peers and media sources. Evidently, information about tobacco, marijuana and other drugs has influenced student decisions regarding use and nonuse of these substances.

Function of Enculturation - The data suggest that youth are most accepting or tolerant of "socially acceptable" substance use behaviors- alcohol use and instrumental substance use. Evidently, tobacco use and marijuana use have become more "socially unacceptable" to Iowa youth since 1975. Students do learn to recognize what are positively and negatively sanctioned substance behaviors.

Function of Alternatives - The data indicate that very few youth perceive boredom (or "nothing else to do") as an important reason for using substances. Iowa youth were substantially involved in a wide variety of constructive or conforming behaviors. In each year since 1975, more youth have become involved in church and extracurricular activities. Students indicated that the most important reason for using alcohol was to have a good time with people.

Paradoxical Findings - Several inconsistencies were apparent among knowledge, attitudes, motives and reported substance use. The most dangerous of the paradoxes involves drinking and driving. For example, 64 percent of the 12th grade students reported that drinking several alcoholic beverages at a party was a good/OK behavior; 84 percent of the students said that it was bad/not OK to drive after drinking; and 42 percent admitted to having driven after using alcohol or other drugs.

The findings for personal variables portray areas of logical association with substance behaviors. A future report (substance user profiles) will assess the extent of these relationships.

VI. Summary and Recommendations

The 1984-85 Iowa Study of Alcohol and Drug Attitudes Among Youth was the fourth in a series of tri-annual studies. A primary goal of the study series has been to assess trends in youth substance attitudes, knowledge and behavior. The assessment has provided useful planning data for school persons and other people involved with the health of Iowa youth.

The 1984-85 youth study was specifically designed to answer four research questions:

- What is the present status of substance use, attitudes and knowledge among youth?
- What are some important trends in youth substance use, attitudes and knowledge?
- Which people seem to be the major influences in a youth's decision to use or not use substances?
- What actions do the findings of the 1984-85 study suggest for school persons?

A 105-item survey was developed for the 1984-85 study. The survey instrument was designed to provide some general and specific answers to the research questions. The survey included questions regarding substance use and nonuse, motives for using and not using substances, knowledge of substance information, parent and peer substance models, attitudes toward

substances, and other questions related to substance use or nonuse. The survey instrument was designed to be read and answered anonymously by sixth, eighth, 10th and 12th grade students.

A stratified, random sampling of 92 public school districts was the basic sampling unit. Another set of districts (n= 98) was added to the 1984-85 sampling unit as a purposive sample to account for special programming and adequate representation by area education agencies. All school districts could elect to participate or not participate in the youth survey. Seventy districts from the stratified sample and 74 districts from the purposive sample chose to participate in the youth survey.

The second and third sampling units were attendance centers within a school district and class enrollments in the sixth, eighth, 10th and 12th grades. The minimum student sample was 18 at each of the four grade levels. Data were collected from 3,473 sixth grade, 4,037 eighth grade, 4,083 10th grade and 4,051 12th grade students. Students could also choose not to participate in the survey, but very few chose not to do so.

The sampling design, the survey and the procedures for administering the survey were very similar for the 1975, 1978, 1981 and 1984 studies. These similarities allowed relevant data comparisons among study years.

The 1984-85 youth data were entered on a computer file and treated according to an SAS program format. The data were reported in various tables according to topics covered in survey questions.

Research Questions 1 and 2: Status and Trends

The following outline presents findings relevant to research questions 1 and 2: current status and trends in youth substance behaviors, attitudes and knowledge.

1. **Alcohol Use and Nonuse in 1984**
   - Approximately 95 percent of the 12th grade students had tried alcohol.
   - Most youth (63-74 percent) had tried alcohol by age 14.
   - Nearly 80 percent of sixth grade and 22 percent of 12th grade students reported themselves to be nonusers of alcohol.
   - The greatest increase in the number of alcohol users seemed to occur between eighth and 10th grades.
   - The largest increase (17 percent) in regular use of alcohol seemed to occur between eighth and 10th grades.
   - The largest increase (8 percent) in heavy use of alcohol was observed between 10th and 12th grades.
   - The frequency of alcohol use among male and female students was very similar.
   - Alcohol use in 1984 appeared to be least prevalent in semirural schools and most prevalent in urban schools.
   - A minority of Iowa youth (13-47 percent) did not intend to use alcohol as adults.
   - Students reporting the consumption of three or more drinks per occasion rose from 4 percent of sixth grade to 60 percent of 12th grade samples.

2. **Alcohol Use and Nonuse Trends 1975-1978-1981-1984**

   Comparisons of youth data from 1975, 1978, 1981 and 1984 indicate:
   - A decrease in the number of alcohol users in 1984.
   - Regular and heavy use of alcohol appeared to remain fairly consistent across the four study years.
   - An increase in 1984 for regular and heavy use of alcohol among urban students and a decrease in heavy use among semiurban and semirural students.
   - An increase in the number of male and female students in 1984 who had never used alcohol.

3. **Tobacco Use and Nonuse in 1984**
   - Approximately 48 percent of the youth in the survey had tried tobacco by age 14.
   - Approximately 10 percent of Iowa youth smoked tobacco.
   - The age range 9-12 years appeared to be the period of highest initial tobacco use.
   - The greatest increase in the casual, regular and heavy use of tobacco occurred between eighth and 10th grades.
   - Female and male tobacco use patterns were very similar.
   - Heavy tobacco use was observed most frequently among urban students and least frequently among rural students.
   - Approximately 87 percent of the youth in the 1984 survey did not intend to smoke tobacco as adults.
   - Use of "smokeless tobacco" is relatively uncommon (3-6 percent users) among Iowa youth.

4. **Marijuana Use and Nonuse in 1984**
   - A majority of students (65-97 percent) had not tried marijuana.
   - Nearly 35 percent of 12th grade students had tried marijuana.
   - Approximately 11 percent of 10th grade and 15 percent of 12th grade students were current users of marijuana.
   - The greatest increase in the number of casual, regular and heavy users of marijuana seemed to occur between eighth and 10th grades.
   - Casual and heavy marijuana use were more common among urban youth.
   - Female and male students used marijuana at nearly the same frequency.
   - Approximately 93 percent of the students did not intend to use marijuana at age 21.

5. **Marijuana Use and Nonuse Trends 1975-1978-1981-1984**
   - Fewer students had tried marijuana in 1984 than had tried marijuana in previous studies.
   - The greatest decline in marijuana use in 1984 appeared to occur in the heavy use category.
   - Youth in 1984 were using marijuana less frequently than in 1981, 1978 or 1975.
   - Marijuana use in 1984 declined in urban, semirural and rural school districts.

6. **Other Drug Use and Nonuse in 1984**
   - A very small number (2-20 percent) of students had tried other drugs.
   - The age range 13-16 years appeared to be the period of highest initial use of the other drugs.
   - Very few students (5 percent) reported being current users of other drugs.
   - The largest increase in the number of other drug users occurred between eighth and 10th grades.
   - Male and female other drug use patterns were very similar.
   - The data indicate that the larger the school district, the more likely that students would try other drugs and begin their use at an earlier age.

7. **Other Drug Use and Nonuse Trends 1975-1978-1981-1984**
   - Fewer 12th grade student had tried other drugs in 1984 (19 percent) than had tried them in 1981 (21 percent).
   - There was an overall trend toward less use of other drugs in 1984, particularly in the casual and regular use categories.

8. **Polysubstance Use and Nonuse in 1984**

Polysubstance use refers to the use of two or more substances within a proscribed period. Computer sorts on the 1984 data resulted in the determination of the number of students who were: nonusers of any substance, users of alcohol only, users of both alcohol and marijuana, users of alcohol and other drugs, users of marijuana and other drugs, and users of all three categories of substances.

- "Alcohol only" accounted for the largest group of users at each grade level (18-61 percent).
- Very few students at any grade level were categorized as marijuana users only (.2-.6 percent) or other drug users only (.1-.2 percent).
- The most frequently reported substance combinations were "alcohol and marijuana" (.3-8.3 percent) and "use of all substances" (.1-6.3 percent).
- Polysubstance use appeared to be more common among urban school districts.

9. Polysubstance Use and Nonuse Trends 1975-1978-1981-1984

- The number of nonusers of any substance increased in 1984 as compared to 1981, 1978, and 1975.
- "Alcohol and marijuana users" and "users of all substances" were the categories which decreased in number from 1975 to 1984.
- There was an increase in the number of "alcohol only users" in the 10th and 12th grades in 1984 as compared to 1981.
- In 1984 there was a 4 percent increase over 1981 in the number of "nonusers of any substance" in each of the four size categories of schools.

10. Student Attitudes Toward Substances and Substance Behaviors

A general observation from these data is that student attitudes toward substances and substance behaviors became more tolerant with each increase in grade level. The major findings regarding student substance attitudes in 1984 are listed below.

- As grade level increased, fewer students (64-52 percent) agreed with the statement, "It is hard for a teen to say no when offered alcohol or marijuana."
- Student attitudes varied toward different types of use behavior. Students reported the most favorable attitudes toward instrumental use and alcohol use and the least favorable attitudes toward tobacco use and marijuana use.
- Large percentages of students (84-95 percent) considered drinking and driving to be bad/wrong behaviors.
  Drinking several alcoholic beverages at a party was approved behavior among 10 percent of the sixth grade and 64 percent of the 12th grade students.
- Approximately 37 percent of the sixth grade and 69 percent of the 12th grade students approved of drinking two to three alcoholic beverages after work.
- Approximately 64 percent of the sixth grade and 52 percent of the 12th grade students agreed that there is nothing wrong with drinking beer or wine.
- There was a marked decline in pro-marijuana attitudes in 1984 as compared to other study years.
- Approximately 9 percent of sixth grade and 34 percent of 12th grade students agreed that there is no harm in taking marijuana once or twice to find out what it is like.
- A minority (4-17 percent) of students judged smoking marijuana at a party and using marijuana to relax to be good/OK behaviors.
- Nearly 18 percent of sixth grade and 43 percent of 12th grade students considered smoking tobacco after a meal to be a good/OK behavior.

11. Substance Knowledge Among Students

Fourteen questions were included in the survey to assess student knowledge about substances. Students were more likely to answer questions correctly with each increase in grade level.

- Students most frequently knew the correct answers to questions concerning alcohol interactions, harmful effects of marijuana, methods to sober up, and drinking and driving.
- Students were least often correct in answering questions concerning psychological dependance, amphetamine effects on the heart, and a minor's access to treatment programs.

Research Question 3: Influences on Youth Substance Decisions

Many survey questions were designed to assess the influence exerted by external sources, including parents, schools, peers and others. Another set of questions attempted to assess internal sources of influence (personal variables). The major findings concerning external and internal sources of influence are reported below.

1. External Sources of Influence

- **Parents** consistently ranked first as influences to not use alcohol, tobacco, marijuana and other drugs. Parents were most frequently cited as the primary source of substance information. Parents ranked second (in terms of frequency of selection) to peers as a source of help for a substance problem.
- **Peers** ranked third as an influence to not use substances. Peers ranked third as a source of information and first as a source of help.
- **School Persons** (teachers, nurse and counselor) ranked second as an influence to not use substances, second as a source of substance information, and seventh (out of nine choices) as a source of help for a substance problem.
- **Siblings** ranked fourth as an influence to not use substances, sixth as a source of information, and fifth as a source of help.

Specific findings for external sources of influence are as follows:

- Approximately 36 percent of alcohol users, 35 percent of tobacco users and 65 percent of marijuana users reported that their parents did not know about their use.
- Nearly 51 percent of alcohol users, 55 percent of tobacco users, and 22 percent of marijuana users reported that their parents knew about these behaviors.
- Students reported that 58 percent of their mothers and 32 percent of their fathers never smoked tobacco. This compares with 65 percent of the 12th grade students who reported never using tobacco. Students also reported that 12 percent of their mothers and 22 percent of their fathers had stopped smoking. Eighteen percent of 12th grade students reported having stopped smoking.
- Students reported that nearly 30 percent of their mothers and 14 percent of their fathers never drank. Moderate drinking (occasionally/a few drinks each week) was reported for 58 percent of the mothers and 59 percent of the fathers. Nearly 63 percent of the 12th grade students reported being moderate/frequent drinkers.
- Personal contact with peers who used alcohol, marijuana and tobacco became more and more likely with each increase in grade level.
- Approximately 44 percent of 12th grade and 33 percent of 10th grade students reported that their friends would approve of them getting drunk once or twice every week.
- Nearly 20 percent of 12th grade and 14 percent of 10th grade students said that their friends would approve of them smoking marijuana.
- Student data indicate that most schools had provided information about substances.
- Apparently, school programs have influenced many (33-46 percent) students to not use substances and reinforced the 28-45 percent of students who had previously decided to not use substances. School programs appeared to exert the most positive influence on the nonuse of marijuana and other drugs. Such programs also appeared to exert a positive influence on tobacco nonuse decisions. A small percentage of students (2-4 percent) reported that school programs had influenced them to stop using substances. School programs seemed to have had the least positive influence on student nonuse of alcohol.

2. Internal Sources of Influence (Personal Variables)

Internal sources of influence on substance use and nonuse behavior included attitudes about substances and substance behaviors, perceived motives for using/not using substances, conforming/nonconforming behaviors, and decision-making styles. Findings regarding motives, decision making and related behaviors were not reported earlier in this summary. Relevant findings for these variables are listed below.

Motives for Not Using

- Students most frequently selected, "...is dangerous to their physical or mental health" as an important reasons for not using alcohol (19 percent of total sample), marijuana (36 percent of total sample), and other drugs (32 percent of total sample).
- One reason for not using substances increased in frequency of selection with each increase in grade level, "...is against their personal or religious beliefs."
- The most frequently chosen reason for not using alcohol was "They might get into an accident and hurt someone."

Motives for Using

- Students most frequently selected, "Because their (families) friends use..." as an important reason for using alcohol (13 percent of total sample), marijuana (22 percent of total sample) and other drugs (20 percent of total sample).
- The response, "They like the way . . . makes them feel," was frequently selected as a reason for using alcohol (16 percent of the total sample), marijuana (19 percent of total sample) and other drugs (17 percent of total sample).
- Two responses, "They like the way . . . makes them feel" and "To have a good time with people," increased in frequency of selection with each increase in grade level.
- "Because they don't have anything else to do," was very seldom selected as an important reason for using alcohol, marijuana or other drugs.
- The two most frequently reported reasons for using alcohol were, "To forget about their problems or unhappiness" and "To have a good time with people."
- The two most frequently reported reasons for using marijuana were, "Because their friends use marijuana" and "To forget about their problems or unhappiness."
- Students most often perceived, regardless of grade level, that "Dealing with the stresses and pressures of everyday life" was an important reason for using other drugs.

Decision Making in Substance Situations

- Two question presented situations in which peers were attempting to persuade a youth to use alcohol. There were eight possible responses for each question from which students could select only one. In both situations, with each increase in grade level, more students reported that they would acquiesce to peer influence to drink. For example, 9 percent of the sixth grade students reported that they would drink a can of beer offered by a friend while 59 percent of 12th grade students selected this response. In the second situation, 16 percent of the sixth grade and 69 percent of the 12th grade students reported that they would concur with their friends' plans and drink.
- One question described a situation which involved peer influence to use marijuana. Almost 6 percent of sixth grade and 16 percent of 12th grade students indicated that they would yield to the peer influence and use marijuana.
- Comparisons of 1984 and 1981 youth responses indicate that more youth in 1984 would not yield to peer influence to use the alcohol and marijuana.

Related Behaviors

- Approximately 82-89 percent of the youth in the 1984 survey reported that they engaged in individual or team sports, outdoor activities or worked on a hobby one or more times in the past month. In 1981 the figures were 81-85 percent for these questions.
- Nearly 70 percent of the total sample reported participating in church activities one or more times in the past month.
- Seventy-six percent of the students reported participating in extracurricular activities at school. The comparable figure for 1981 was 63 percent of the total sample.
- Most students (84-96 percent) did not participate during the previous month in five of six deviant behaviors listed. The most frequently mentioned deviant behaviors, with the exception of driving while under the influence, were damage to public or private property

(16 percent) and giving a teacher a fake excuse for being absent (16 percent).

- The data for 12th grade students reveals that 42 percent of them had driven a car after using alcohol or other drugs on one or more occasions in the past month. The comparable statistic for 1981 was 46 percent of the 12th grade sample.

Research Question 4: Recommended Actions for School Persons and Others

The 1984-85 Iowa Study of Alcohol and Drug Attitudes and Behavior Among Youth provided a very broad perspective on substance use in Iowa. Much information from the four study years of 1975, 1978, 1981 and 1984 has been condensed in this report.

Five major themes were consistently repeated in the survey:

- Youth decide to use or not use substances.
- Peers, parents, school persons and others exert their influence on a youth's decisions to use or not use substances.
- Many factors within the individual (e.g., values, personal or religious beliefs, self-esteem) strongly influence his/her substance use or nonuse behaviors.
- Adolescence is a very healthy life stage through which most Iowa youth pass successfully.
- All adolescents are not basically alike. It is damaging and misleading to generalize to all youth the behaviors, problems and characteristics exhibited by a few.

The five themes and the data from survey logically lead to some specific recommendations for school persons, families and persons who serve youth. Some specific actions can be taken to respond to student substance use. Less obvious, however, are community values, attitudes and behaviors that influence students' decisions regarding substance use and nonuse. Community responses to student substance use must consider the phenomena of modeling, imitation, identification, socialization and community sanctions. Youth receive some very diverse messages from their parents, peers, school persons, churches, community leaders and the media regarding substances and substance behaviors.

Recommendations regarding these social influences and community responses are necessarily limited to actions supported by the data in the four youth surveys.

1. Recommendations for School Persons

Curriculum and Instruction - Students and parents expect schools to be a primary source of information about substances and substance behaviors. School persons must recognize the appropriateness and credibility of the information they present to students. Such information and the way in which it is presented should match the developmental concerns and interests of students. Classroom instruction should help students reduce the ambivalence and/or confusion between their substance attitudes, motives, knowledge and actual substance behaviors. Classroom instruction should help students develop the skills to both abstain from substance use and carry through responsible substance decisions personally and socially. Specifically, school persons should:

- Reassess the time and emphasis given to specific substances and substance behaviors. For example, students indicated that more instructional time is given to "other drugs" and marijuana and less time is given to alcohol, tobacco and medicines.
- Evaluate the major concepts which should be learned through the substance education program. Particularly important are the concepts of substance interactions, substance dependency, prevention of substance abuse, non-substance alternative behaviors and responsible use of medicines and over-the-counter drugs.
- Reconsider the two concepts of dysfunctional families and enabling substance use in relationship to substance abuse and dependency. Many Iowa students, approximately 15 percent of any class, are living in a family where one or both parents are alcohol-dependent. Other students are living with older siblings who are substance abusers or substance-

dependent. Sensitive instruction can help these students to more constructively cope with their dysfunctional family situations.

- Recognize in curriculum and instruction the developmental shift from student concerns at the elementary level (i.e., health facts and personal safety) to their concerns at the secondary level (i.e., personal lifestyle and social aspects of substance use and nonuse).
- Curriculum and instruction should emphasize the decision-making process as applied to substance behaviors.
- Any health education curriculum adopted by a school district should give a major instructional emphasis to substance abuse prevention.

School Interventions - Students and their families look to schools as a source of help for problems related to substance use. Early identification and early interventions are plausible roles for school persons, especially in the following circumstances:

- Students who have become dependent upon substances.
- Students who are regular or heavy users of substances.
- Students seeking help for a friend or sibling.
- Students experiencing personal and/or school problems related to their parents' substance use.
- Students who wish to return to school after completing a substance abuse treatment program.

School persons should reconsider their roles, policies and procedures for getting or giving help to students in each of these circumstances. Many Iowa youth, however, indicate that they consider school personnel to be a "threat" (i.e., judgmental attitudes and punitive approaches) to obtaining such help. Six specific actions are suggested by this information and youth data:

- Review school policies and procedures in respect to the circumstances listed above. The policy review should also consider procedures for school staff experiencing substance abuse problems. District policy should be based on the philosophy of assisting people to receive help for a health problem.
- Reassess working relationships with substance abuse and other community helping services. It may be necessary for schools to act as a catalyst to develop needed services for youth, their families and school staff.
- Establish two forms of additional training for school personnel: 1) a general staff training to recognize substance problems and how to initiate helpful communciations with students regarding these problems and 2) a focused training for selected school personnel so that they can function as an intervention team.
- Publicly recognize the reality of student substance use. A periodic youth assessment will indicate the extent of substance use and help set directions for the school's response to student substance use.
- Consider implementing a "peer helper" program at the secondary level. The data clearly indicate that youth will turn to their peers for substance information and help. The data also indicate that many youth would respond to peer support. Peer helping programs have functioned effectively as both a prevention and intervention approach.
- Establish a support group or network for children from chemically dependent families. Such support groups are the earliest interventions with a very high-risk group. School persons can take an active role in establishing support groups in the community or at school.

2. Recommendations for Parents and Families

Many parents and families can be reassured that they are "doing some things right." Youth perceive parents to exert many positive influences on their substance behaviors. Most youth view their parents as a source of help for substance problems. A majority of youth reported positive communications and support from their parents. All parents and families should be encouraged not

to forfeit these positive relationships and influence when their children enter the teen years. Some specific recommendations are apparent:

- Children and youth strongly identify with the substance behaviors of their parents and siblings. Family members must be willing to examine their own substance use behaviors and change those which they don't wish youth to adopt.
- Families should find the time to discuss guidelines or family rules regarding the use or nonuse of alcohol, tobacco, medicines, over-the-counter drugs and other substances. Considerable confusion exists between youths and their families regarding acceptable and unacceptable substance behaviors.
- Many communities allow families of substance-dependent youth to remain isolated. Such families can offer encouragement and support to one another as they try to cope with the problems associated with substance dependency/abuse among their children. Family support groups are very important in the whole continuum from identifying and confronting substance abuse/dependency through treatment and after care.
- Families can work together to plan and carry out nonsubstance activities. For example, Project Graduation demonstrates concretely that people can have a great time together without using substances.
- Parents should be encouraged to get to know their children's friends and their friend's parents. Such communication networks will help to dispel the notion that "everyone else is doing it" or that other families condone youth substance use.
- Substance education begins very early through the broadcast media and films. Family members need to be well-enough informed to effectively counteract the negative media messages their children receive. For example, most media messages regarding alcohol and over-the-counter substances repeat the theme "you have a right to feel good" and "our product will make you feel good or feel better about yourself."

3. Recommendations for Agencies Serving Youth

Approximately 8 percent of Iowa youth indicated that they would turn to a crisis line or substance abuse treatment center if they had a personal problem related to substance use.

Evidently, several factors are operative in interventions with a youth: 1) a stigma (denial and embarrassment) associated with seeking professional help for oneself or one's child, 2) a shortage of local services for adolescent clients, 3) a reluctance on the part of school persons to refer students for substance abuse assessments, 4) an ineffective outreach effort by some local agencies, and 5) poor referral and follow-up arrangements between schools and local agencies. Helping agencies should assess each of the factors mentioned in relationship to the services they actually offer to youth and their families.

Community agencies and schools have developed some effective systems for identifying students experiencing problems and for providing the necessary help and follow-up. Most notable among the models are the school intervention team approach and the student assistance program.

Community agencies and schools can also work together to establish support groups for children of chemically dependent families and support groups for "recovering youth" (aftercare groups).

Other community groups (e.g., 4-H, scouts, FFA, church youth groups) can offer youth some involvement and investment in nonsubstance alternatives. Such alternative behaviors should help youth meet some very important needs (e.g., sense of belonging, care-giving, achievement and fun and adventure) without resorting to substance use. Youth should be involved in developing and implementing the alternative activities or programs.